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ABSTRACT

Designed to assist business educators with the implementation of competency-based instruction, these course outlines identify recommended competencies and skill areas for beginning workers in accounting, business data processing, clerical accounting, and recordkeeping occupations. Each outline contains listings of enabling, terminal, and personal employability competencies. Covered in the accounting outline are accounting skill areas, establishing records, business transactions, and payrolls. The following topics are among those included in the sections on business data processing: automated accounting, business calculations, business systems, career exploration, data entry, programming concepts and languages, unit records, computer classifications and hardware, computer operations, and software. Addressed next are various aspects of clerical accounting, including establishing records, calculating machines, checking accounts, communication skills, care and maintenance of office equipment, purchases and sales, reprographics, typewriting, tax reports, and mail processing. Following a discussion of recordkeeping fundamentals, personal and business records and filing are discussed. A final outline provides a survey of data processing, with attention to card input, an overview of computers; business, society, and computers; and programming concepts. (A related guide covering business data processing competencies is available separately--see note.) (MN)

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COMPETENCY-BASED COURSE OUTLINES FOR BUSINESS AND OFFICE EDUCATION

ACCOUNTING, BUSINESS DATA PROCESSING, CLERICAL ACCOUNTING, AND RECORDKEEPING OCCUPATIONS

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Division of Program Services, Vocational Education--Department of Education--Commonwealth of Virginia--Richmond, VA 23216
May 1981

FOREWORD

Large increases in the number of employees needed for business and office occupations are projected during the next decade. Business education in high schools is the foundation of the program to prepare individuals for these occupations.

This guide has been prepared to assist teachers with the identification of research-based competencies. The use of validated competencies will enable the teacher to prepare students with appropriate competencies for the labor market.

All teachers are urged to exercise their creative efforts to adapt and select content that is appropriate for the needs of students in their community.

Melvin H. Garner
Administrative Director of
Vocational and Adult Education

ACKNOWLEDGEMENTS

An improvement objective of the current five-year plan for vocational education in Virginia is that by June 20, 1982, each school division shall have implemented competency-based instruction in approved vocational education programs. This objective affirms a belief in instruction intended to best meet the needs of students. Competency-based instruction requires clearly identified competencies for each offering as well as instructional procedures to assist each student to achieve the competencies.

The Business Education Service as a part of the Division of Vocational Education is committed to the goal of providing quality competency-based instruction in all business and office education offerings. One of the strategies for achieving this goal is the development of competency-based course outlines.

This book includes course outlines for the accounting, business data processing, clerical accounting, and recordkeeping programs. Each outline identifies recommended competencies for the offerings, a first essential step in the implementation of competency-based instruction.

Development of these competency-based course outlines has involved the time, effort, and talents of the task force members identified below. Special recognition is given to these dedicated business educators:

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Dr. Betty R. Ricks and Dr. B. June Schmidt are acknowledged for their leadership of the task force. They have also assumed responsibility for assembling and editing this publication.

Carl E. Jorgensen
State Supervisor
Business Education Service

INTRODUCTION

The course outlines contained in this book were developed to assist business educators with the implementation of competency-based instruction. Essential skill areas and competencies for beginning workers in accounting, business data processing, clerical accounting, and recordkeeping occupations are identified in the outlines.

Development of the Outlines

Content included in the outlines is based on the following:

A. V-TECS catalogs for bookkeeping, accounting, and payroll clerk[1] noted as BAPC in the outlines; for data processing operations[2] noted as DPO in the outlines; for programming operations[3] noted as P in the outlines; and for secretarial, stenographic, typing and related occupations[4] noted as SSTR in the outlines.

B. For the business data processing outlines, information contained in the guide Business Data Processing, Program Competencies[5] was also used. This guide was developed from V-TECS catalogs for business data processing and from two surveys completed in Virginia. One of the surveys was of business data processing teachers to determine content of the curriculum at the time and the other was one of potential employers to determine job opportunities for business data processing graduates.

C. Teacher input as to what is required of students for initial employment and as to what can reasonably be expected of students.

D. Content previously recommended by the Business Education Service is appropriate for each course.

E. Current instructional materials available for business and office education offerings.

[1] A Catalog of Performance Objectives, Criterion-Referenced Measures and Performance Guides: Bookkeeping/Accounting/Payroll Clerk. Montgomery AL 36130: Department of Education, Division of Vocational Education, 1978.

[2] A Catalog of Performance Objectives, Criterion-Referenced Measures and Performance Guides for Data Processing Operations. Atlanta, GA 30334: Georgia Department of Education, Office of Adult and Vocational Education, July 1875.

[3] A Catalog of Performance Objectives, Criterion-Referenced Measures and Performance Guides for Programmers. Atlanta, GA 30334: Georgia Department of Education, Office of Adult and Vocational Education.

[4] A Catalog of Performance Objectives, Criterion-Referenced Measures and Performance Guides for Secretarial, Stenographic, Typing, and Related Occupations. Richmond, VA 23216: Division of Vocational Education, Department of Education, July 1975.

[5] Business Data Processing Program Competencies. Richmond, VA 23216: Division of Program Services, Vocational Education, Department of Education, January 1979.

Content of the Outlines

Each outline is composed of a course description; a listing of skill areas; a topical outline; and enabling, terminal, and personal employability competencies. For the occupational preparation program outlines, Business Data Processing I and II and Clerical Accounting I and II, the skill areas are listed alphabetically as no skill area is considered more important than another. However, the personal employability skills and knowledges, which do not have enabling competencies identified, are listed last in each outline. For the Accounting, Recordkeeping, and Survey of Data Processing outlines, the skill areas are listed in logical instructional order as determined by those who developed the outlines.

The competencies stated for the sequential outlines of Clerical Accounting I and II are often quite similar. The difference is usually in the difficulty of the material used and with the level of performance expected of more advanced students.

Expected terminal competencies in the outlines are set at levels considered minimum for advancement to the next course or for job entry. The performance levels are generally at a lower level than those in the V-TECS catalogs since those in the catalogs reflect on-the-job performance of individuals employed for some time.

Suggestions for Using the Outlines

Even though performance levels in the outlines are intended as minimum, teachers may find that students do not achieve all of the competencies, particularly for the occupational preparation courses. Achievement of eighty percent of the competencies listed for Business Data Processing I, Business Data Processing II, Clerical Accounting I, or Clerical Accounting II may be considered average performance for each course. Teachers should, however, strive to have students exceed the average and exceed the competency levels identified in the outlines whenever possible. Students can be encouraged by being assigned higher grades on the basis of achieving more than eighty percent of the competencies or on the basis of exceeding the performance levels identified for the competencies.

The outlines are designed to aid the business teacher in establishing appropriate terminal and personal employability competencies for each student to gain employment. The competencies can be effectively used with local advisory committees and should assist in the articulation of instruction from course to course as well as from the high school level to the post-secondary level.

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ACCOUNTING (6320)

Grade Level: 11 or 12 **Prerequisites:** None

Accounting is a one-year, single-period course offered on an elective basis at either the eleventh- or twelfth-grade level. It is supplementary to all occupational preparation offerings except Clerical Accounting I and II. The course is designed to provide basic knowledge of accounting procedures and to develop skills in recording and analyzing transactions. In addition, preparation, use, and interpretation of financial records and statements are emphasized.

The following skill areas are included in Accounting:

Skill Area 1 - ESTABLISH RECORDS
- 1.1 Terminology
- 1.2 Beginning Balance Sheet
- 1.3 Opening Entry
- 1.4 Corrections

Skill Area 2 - BUSINESS TRANSACTIONS
- 2.1 Analyze
- 2.2 Journalize
- 2.3 Prove
- 2.4 Post

Skill Area 3 - END-OF-FISCAL PERIOD
- 3.1 Trial Balance
- 3.2 Adjusting Entries
- 3.3 Complete Worksheet
- 3.4 Closing Procedures
- 3.5 Financial Statements

Skill Area 4 - PAYROLL
- 4.1 Gross Earnings
- 4.2 Deductions
- 4.3 Net Pay
- 4.4 Records
- 4.5 Disbursements
- 4.6 Journal Entries

Skill Area 5 - DATA PROCESSING
- 5.1 Terminology
- 5.2 Relationships
- 5.3 Flowcharting
- 5.4 Accounting Applications

Skill Area 6 - PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES
- 6.1 Future Business Leaders of America
- 6.2 Organization Skills
- 6.3 Human Relations Skills
- 6.4 Responsibility

ACCOUNTING (6320)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
1. ESTABLISH RECORDS	CAN THE STUDENT:	CAN THE STUDENT:	
1.1 Terminology	Define specific accounting terms, such as asset, liability, capital, debit, credit, journals, source documents, and double entry accounting?	1.1 Use accounting terms correctly as they occur in oral or written work?	
1.2 Beginning Balance Sheet	Classify items as assets, liabilities, or capital? Solve the accounting equation? Complete a balance sheet including the heading, asset, liability, and capital sections?	1.2 Correctly prepare a beginning balance sheet?	BAPC 28
1.3 Opening Entry	Transfer the beginning balance sheet information to the general journal in correct entry form? Open general ledger accounts by recording the account titles and assigned numbers? Transfer debit and credit balances from opening entry to the general ledger accounts?	1.3 Correctly record and post the opening entry?	BAPC 28

ACCOUNTING (6320)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
1.4 Corrections	CAN THE STUDENT: Locate errors? Correct errors using proper techniques?	CAN THE STUDENT:	
2. BUSINESS TRANSACTIONS			
2.1 Analyze	Label the debit and credit side of accounts? Label the increase and decrease side of accounts? Record transactions involving increases and decreases in income and expense accounts? Pencil foot accounts and compute their balances?	2.1 Correctly debit and credit accounts for ten transactions involving increases and decreases to the accounts?	
2.2 Journalize	Journalize cash transactions in a two-column general journal and a multi-column cash journal?	2.2 Journalize business transactions for a period of one month?	BAPC 8, 10, 12, 15, 23, 50, 70

ACCOUNTING (6320)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Journalize transactions of a merchandising business in a combination journal and special journals?	CAN THE STUDENT:	
2.3 Prove	Foot and prove the equality of debits and credits in journals?	2.31 Foot and prove the equality of debits and credits in one set of journals?	BAPC 27
	Prove cash by comparing check record or actual cash balance with cash journal balance?	2.32 Prove cash?	BAPC 27
	Total and rule the journals?		
2.4 Post	Post the individual amounts in the general columns to the accounts in the general and subsidiary ledgers?	2.4 Post to the proper ledger accounts for a period of one month?	BAPC 8, 10, 15, 19, 21, 22, 23
	Post the totals of the special columns to the general ledger?		
	Indicate proper posting references?		
3. END-OF-FISCAL PERIOD			
3.1 Trial Balance	Foot ledger accounts and compute the account balances?	3.1 Prepare a trial balance to prove equality of debits and credits posted to ledger accounts?	BAPC 25

ACCOUNTING (6320)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Record account balances in trial balance columns of worksheet and prove equality of debits and credits?		
	Follow recognized procedures for locating errors that can cause trial balances to be out of balance?		
3.2 Adjusting Entries	Plan and record adjustments on the worksheet needed to update account balances, such as merchandise inventory, prepaid amounts, supplies, depreciation, and bad debts?	3.21 Accurately record five adjusting entry amounts in proper columns on worksheet?	
		3.22 Accurately journalize and post five adjusting entries?	BAPC 9
	Total adjustment columns and prove equality of debit and credit totals?		
	Update general ledger accounts by recording and posting adjusting entries?		
3.3 Complete Worksheet	Combine trial balance and adjustment columns and extend the income and expense items to the income statement columns?	3.3 Accurately complete worksheet to determine amount of income or loss for a fiscal period?	

ACCOUNTING (6320)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Total the income statement and balance sheet columns?		
	Calculate net income or net loss by determining difference in income statement/balance sheet columns?		
	Enter income/loss, total, and rule columns?		
3.4 Closing Procedures	Prepare journal entries to clear the income, cost, and the expense accounts by transferring their balances to the income and expense summary account?	3.41 Close the ledger by accurately preparing entries needed for the summary, capital, and drawing accounts?	
	Prepare a journal entry to transfer the balance of the income and expense summary account to the capital account?	3.42 Post closing entries?	
	Prepare a journal entry to transfer the balance of the drawing account to the capital account?	3.43 Prepare a post-closing trial balance to prove the equality of debits and credits posted to the accounts?	BAPC 29
	Post the closing entries to the general ledger?		
	Prepare a post-closing trial balance?		

ACCOUNTING (6320)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
3.5 **Financial Statements**			
Income statement	Prepare income statements from completed worksheets?	3.51 Accurately prepare an income statement from a completed worksheet?	BAPC 30
Capital statement	Prepare capital statements from completed worksheets and capital account information?	3.52 Accurately prepare a capital statement from a completed worksheet and capital account information?	BAPC 31
Balance sheet	Prepare balance sheets from completed worksheets and capital statements?	3.53 Accurately prepare a balance sheet from a completed worksheet and capital statement?	BAPC 32
Supporting schedules	Apply verification principle using subsidiary and general ledgers to prepare schedules such as accounts receivable, accounts payable, and cost of goods sold?	3.54 Accurately prepare supporting schedules for accounts receivable, accounts payable, and cost of goods sold?	BAPC 33, 34 35
Analyze statements	Using financial statements, interpret the condition and progress of the business during a fiscal period?	3.55 Use the financial statements of a business to extract five items of information to determine the condition and progress of the business?	

ACCOUNTING (6320)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
4. PAYROLL			
4.1 Gross Earnings	Compute gross earnings for employees who receive salaries, hourly earnings including overtime, and/or commissions?	4.1 Accurately compute five net pay amounts including calculation of gross earnings and deductions?	BAPC 60, 63
4.2 Deductions	Compute required and voluntary deductions using charts or by computations?	4.2 Accurately complete and verify payroll for five employees when given time cards, payroll register, and individual employee earnings records?	BAPC 60, 62
4.3 Net Pay	Compute net pay?		
4.4 Records	Record payroll computations in a payroll register and on individual employees earnings records?		
4.5 Disbursements	Compute a payroll change sheet and cash slips for disbursing cash payroll? Prepare voucher checks?	4.5 Accurately prepare five pay vouchers or cash slips from payroll records?	BAPC 64

ACCOUNTING (6320)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
4.6 Journal Entries	Journalize and post the entries for salary expense, Federal Insurance Contributions Act (FICA) taxes, employee income taxes, and other deductions?	4.61 Accurately journalize and post entries for salary expense, FICA tax, Federal Income tax, State Income tax, and other deductions?	BAPC 24
	Calculate, journalize, and post the entries for employer FICA, State Unemployment Tax Act (SUTA), and Federal Unemployment Tax Act (FUTA) taxes?	4.62 Accurately journalize and post entries for the employer FICA, FUTA, and SUTA taxes?	BAPC 14
5. DATA PROCESSING			
5.1 Terminology	Define basic data processing terms?	5.1 Use data processing terms correctly as they occur in oral or written work?	
5.2 Relationships	Explain the importance of electronic data processing as it relates to accounting?	5.21 Identify the effects of electronic data processing on accounting work?	
	Trace the flow of work between the accounting department and the computer center?	5.22 Describe the relationship that exists between a computer center and an accounting department?	

ACCOUNTING (6320)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
5.3 Flowcharting	Use flowchart symbols to show how an accounting problem can be solved using electronic data processing?	5.3 Correctly prepare a flowchart to solve an accounting problem using electronic data processing?	
5.4 Accounting Applications	Identify accounting applications appropriate for a computer system?	5.41 Describe how a manual accounting operation can be computerized?	
	Compare manual systems and electronic data processing systems in accounting operations such as journalizing, posting, payroll, and purchases and sales records?	5.42 Assess the impact of microcomputers on accounting applications?	
	Describe the effects of microcomputers on the accounting operations of businesses?		

ACCOUNTING (6320)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT:
6. PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES	
6.1 Future Business Leaders of America	6.1 Join and participate in local, regional, and state activities of the Future Business Leaders of America?
6.2 Organizational Skills	6.21 Organize work materials for best use of time?
	6.22 Plan work efficiently to meet deadlines?
	6.23 Maintain an uncluttered area in and around desk?
6.3 Human Relations Skills	6.31 Evaluate own performance realistically?
	6.32 Work harmoniously with others on a group assignment?
	6.33 Demonstrate attitudes of respect and cooperation with peers?
	6.34 Accept constructive criticism in a positive manner?
	6.35 Exhibit self-control in contributing to class discussions?
6.4 Responsibility	6.41 Exhibit traits which demonstrate responsibility including bringing proper materials to class, productive use of time, and economic use of supplies?

ACCOUNTING (6320)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT: 6.42 Attend class regularly? 6.43 Arrive on time? 6.44 Exhibit persistence and initiative in completing assignments? 6.45 Follow oral and written instructions in completing assignments? 6.46 Identify personal responsibilities within a group assignment and follow through to completion?

BUSINESS DATA PROCESSING I (6640)

Grade Level: 11

Prerequisites: General Business
Typewriting

Business Data Processing I is a double-period occupational preparation course offered at the elventh-grade level. Students are introduced to data processing procedures and examine careers in data processing. The course is job oriented and includes instruction in data entry and peripheral equipment operation. Electronic data processing systems and programming also are introduced. Accounting is integrated into the course.

The following skill areas are included in Business Data Processing I:

SKILL AREA 1 - ACCOUNTING

- 1.1 Terminology
- 1.2 Beginning Balance Sheet
- 1.3 Opening Entry
- 1.4 Analyze
- 1.5 Journalize
- 1.6 Prove
- 1.7 Post
- 1.8 Trial Balance
- 1.9 Financial Statements

SKILL AREA 2 - AUTOMATED ACCOUNTING

- 2.1 Format, Analyze, and Code Records
- 2.2 Record/Edit Account Transactions
- 2.3 Journal/Register Transactions
- 2.4 Posting Report
- 2.5 Trial Balance
- 2.6 Financial Statements

SKILL AREA 3 - BUSINESS CALCULATIONS

- 3.1 Math Review
- 3.2 Ten-key Machine Operation
- 3.3 Arithmetic Operations
- 3.4 Applications and Terminology

SKILL AREA 4 - BUSINESS SYSTEMS

- 4.1 Introduction
- 4.2 Flowcharting
- 4.3 Payroll Applications

SKILL AREA 5 - CAREER EXPLORATION

- 5.1 Preparation
- 5.2 Choice
- 5.3 Emerging Occupations

SKILL AREA 6 - DATA ENTRY

- 6.1 Off-line
- 6.2 On-line
- 6.3 Machine Malfunctions

SKILL AREA 7 - INTRODUCTION TO DATA PROCESSING

- 7.1 Terminology
- 7.2 Operations
- 7.3 Computer Overview
- 7.4 Hardware
- 7.5 Software
- 7.6 Storage
- 7.7 Numbering Systems
- 7.8 Data Representation

SKILL AREA 8 - PROGRAMMING CONCEPTS

- 8.1 Procedures
- 8.2 Problem-Solving Techniques
- 8.3 Code
- 8.4 Test
- 8.5 Documentation

SKILL AREA 9 - PROGRAMMING LANGUAGE: BASIC

- 9.1 Language Structure and Statements
- 9.2 Systems Commands
- 9.3 List
- 9.4 Calculations
- 9.5 Functions and Subroutines
- 9.6 Single-Level Tables
- 9.7 Minor, Intermediate, and Final Totals
- 9.8 Disk Files

SKILL AREA 10 - UNIT RECORDS

- 10.1 Cards
- 10.2 Card Formats
- 10.3 Card Sorter
- 10.4 Reproducer
- 10.5 Interpreter
- 10.6 Collator
- 10.7 Card Jams

SKILL ARES 11 - PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES

- 11.1 Future Business Leaders of America
- 11.2 Human Relations Skills
- 11.3 Job-Seeking Skills
- 11.4 Organizational Skills
- 11.5 Communication Skills

BUSINESS DATA PROCESSING I (6640)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
1. ACCOUNTING			
1.1 Terminology	Define specific accounting terms, such as asset, liability, capital, debit, credit, journals, source documents, and double-entry accounting?	1.1 Use accounting terms correctly as they occur in oral or written work?	
1.2 Beginning Balance Sheet	Classify items as assets, liabilities, or capital? Solve the accounting equation? Complete balance sheets including the heading, asset, liability, and capital sections?	1.2 Prepare a beginning balance sheet?	BAPC 28
1.3 Opening Entry	Transfer the beginning balance sheet information to the general journal? Open general ledger accounts by recording the account titles and assigned numbers? Transfer debit and credit balances from opening entry to the general ledger accounts?	1.3 Record and post the opening entry?	BAPC 28

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
1.4 Analyze	Label the debit and credit side of accounts? Label the increase and decrease side of accounts? Record transactions involving increases and decreases in assets, liabilities, and owner's equity accounts? Record transactions involving increases and decreases in income and expense accounts? Pencil foot accounts and compute their balances?	1.4 Debit and credit accounts for ten transactions involving increases and decreases to the accounts?	
1.5 Journalize	Journalize cash transactions in a two-column general journal and a multi-column cash journal? Record cash transactions including deposits, checks, petty cash, and bank charges? Journalize transactions of a merchandising business in combination and special journals?	1.5 Journalize business transactions for a period of one month?	BAPC, 8 10, 12 15, 23 50, 70
1.6 Prove	Foot and prove the equality of debits and credits in journals?	1.61 Foot and prove the equality of debits and credits in one set of journals?	BAPC 27

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Prove cash by comparing check record of actual cash balance with cash journal balance?	1.62 Prove cash?	BAPC 27
	Total and rule the journals?		
1.7 Post	Post the individual amounts in the general columns to the accounts in the general and subsidiary ledgers?	1.7 Post journal entries to the proper ledger accounts for a period of one month?	BAPC 8 10, 15, 19, 21, 22, 23
	Post the totals of the special columns to the general ledger?		
	Indicate proper posting references?		
1.8 Trial Balance	Foot ledger accounts and compute the account balances?	1.8 Prepare a trial balance to prove equality of debits and credits posted to ledger accounts?	BAPC 25
	Record account balances in trial balance columns of worksheets and prove equality of debit and credit totals?		
	Follow recognized procedures for locating errors that can cause trial balances to be out of balance?		
	Correct errors using proper techniques?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
1.9 Financial Statements Income statement Balance sheet	Prepare income statements from trial balances? Prepare balance sheets from trial balances?	1.91 Prepare income statement from trial balance? 1.92 Prepare balance sheet from trial balance? 1.93 Use the financial statements of a business to extract five items of information?	BAPC 30 BAPC 32
2. AUTOMATED ACCOUNTING			
2.1 Format, Analyze, and Code Records	Determine fields to be included on the transaction record? Interpret the use of the fields on the transaction record? Determine fields to be included on the account balance record? Interpret the use of the fields on the account balance record?	2.11 Using debit-credit, transaction-type, and record-type codes, code 20 transactions affecting asset, liability, capital, income, and expense accounts? 2.12 Code an account balance record for an asset, liability, capital, income, and expense account?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Explain the function of debit-credit, transaction-type, and record-type codes as used on transaction and account balance records? Analyze and code transactions affecting asset, liability, capital, income, and expense accounts? Code account balance records for asset, liability, capital, income, and expense accounts?	CAN THE STUDENT:	
2.2 Record/Edit Account Transactions	Record on punched cards or magnetic media account balances and transaction records? Use prepared computer programs to check the accuracy of recorded data?	2.21 Record 10 account balances and 25 transactions using either punched cards or magnetic media? 2.22 Using prepared computer programs, edit account balances and transaction records for a fiscal period?	
2.3 Journal/Register Transactions	Sort transaction records? Use computer programs and documentation to produce cash, sales, purchases, and general journals/registers with multi-columns?	2.31 Use computer programs and documentation to produce journals/registers for a fiscal period?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Prove the accuracy of journals/registers by comparing column totals to transaction batch totals?	2.32 Prove the accuracy of journals/registers by comparing column totals to transaction batch totals?	
	Prove cash by comparing actual cash balances with cash journal totals?	2.33 Prove cash by comparing journal register totals to actual cash balance?	
2.4 Posting Report	Sort and merge transactions and balance records?	2.41 Use computer program and documentation to prepare a posting report for a fiscal period?	
	Use account balances and transaction records, computer program, and documentation to produce posting reports?	2.42 Create an updated account balance record for a fiscal period?	
	Create new account balance records from the posting reports?		
2.5 Trial Balance	Sort account balance records?	2.5 Using updated account balance records, computer program, and documentation, prepare a trial balance for a fiscal period?	
	Use updated account balance records, computer program, and documentation to produce trial balances?		
	Locate and correct errors that may cause trial balances to be out of balance?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
2.6 Financial Statements	Select appropriate account balance records for the calculation of net profit?		
	Prepare income statements using computer program, documentation, and account balance records?	2.61 Using a computer program, documentation, and account balance records, produce an income statement for a fiscal period?	
	Use account balance records to produce a balance sheet?	2.62 Using a computer program, documentation, and account balance records, produce a balance sheet?	
3. BUSINESS CALCULATIONS			
3.1 Math Review	Perform the basic arithmetical processes of addition, subtraction, multiplication, and division?	3.1 Perform the basic arithmetical processes of addition, subtraction, multiplication, and division?	
3.2 Ten-key Machine Operation	Operate ten-key calculating machines using proper fingering?	3.2 Operate ten-key calculating machines by touch?	
3.3 Arithmetic Operations	Perform addition, subtraction, multiplication, and division on a calculator?	3.3 Perform addition, subtraction, multiplication, and division on a calculator?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Use shortcuts and special function keys to increase speed? Use verification techniques to improve accuracy?	CAN THE STUDENT:	
3.4 Applications and Terminology	Compute simple applications of discounts, markups, sales taxes, commissions, interest, and extensions? Use proper terminology in discussing business forms?	3.4 Compute and verify amounts and totals on various business forms?	
4. BUSINESS SYSTEMS			
4.1 Introduction	Identify the steps in the development of a data processing system? List factors considered in selecting a data processing system?	4.1 Identify the procedures in the development of a data processing system?	
4.2 Flowcharting	Identify flowchart symbols for systems flowcharting? Demonstrate methods of systems flowchart construction?	4.2 Construct a business systems flowchart using correct symbols?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Using flowcharts, explain the steps for order and billing, accounts receivable, accounts payable, or inventory management systems? Identify reports generated by typical business systems? Construct flowcharts for order and billing, accounts receivable, accounts payable, or inventory management systems?	CAN THE STUDENT:	
4.3 Payroll Applications Calculate/record	Compute gross earnings for employees who receive salaries, hourly earnings including overtime, and/or commissions? Compute required and voluntary deductions using charts or by computations? Compute net pay? Record payroll computations in a payroll register and on individual employees earnings records?	4.31 Complete and verify payroll for five employees when given time cards, payroll register, and individual employees earnings records?	BAPC 60, 63

BUSINESS DATA PROCESSING I (6640)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Disbursements	Compute payroll change sheets and cash slips for disbursing cash payroll?	4.32 Prepare five pay vouchers or cash slips from payroll records?	BAPC 64
5. CAREER EXPLORATION			
5.1 Preparation	List entry-level qualifications required for data processing employment?	5.11 List entry-level qualifications for data processing employment?	
	Identify sources of education for data processing careers?	5.12 List educational opportunities for advanced study in data processing?	
5.2 Choice	List careers in data processing?	5.21 Match a list of job titles with job descriptions and entry-level requirements?	
	Match operations performed with data processing job titles?	5.22 Construct a personal career ladder for two positions?	
	Match job titles with entry-level requirements?		
	Match individual abilities and skills with entry-level requirements?		
	Construct career ladders for data processing jobs?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
5.3 Emerging Occupations	List examples of new computer applications? Identify career opportunities resulting from new computer applications?	5.3 Give examples of new computer applications that will provide future career opportunities?	
6. DATA ENTRY			
6.1 Off-Line	Explain the relationship between a source document and an entry record? Set up key-entry devices? From record layouts, prepare data entry programs for key-entry devices? Key data from source documents? Verify keyed input for accuracy using verification devices? Correct entry errors identified by verification procedures? Maintain sequence and control of source documents to keyed data records?	6.11 Perform off-line data entry operations? 6.12 On an off-line device, key data from source documents at a minimum rate of 7,000 key strokes per hour with a maximum five percent error rate?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
6.2 <u>On-Line</u>	Sign-on/sign-off of on-line devices?	6.21 Perform on-line data entry operations?	
	Recall existing screen formats used to key data?	6.22 On an on-line device, key data from source documents at a minimum rate of 7,000 key strokes per hour with a maximum five percent error rate?	
	Key data from source documents?		
	Respond to displayed messages?		
	Check for keying errors by comparing printouts to source data?		
	Recall existing verification screen formats to enter data for verification?		
	Correct entry errors identified by verification procedures?		
6.3 <u>Machine Malfunctions</u>	Recognize machine malfunctions?	6.3 Detect and report machine malfunctions on key-entry devices?	
	Report malfunctions to appropriate individuals?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
7. INTRODUCTION TO DATA PROCESSING			
7.1 Terminology	Define typical data processing terms?	7.1 Define typical data processing terms?	
7.2 Operations	Identify sequential steps in data processing operations?	7.21 Given steps for data processing operations, arrange the steps in sequence?	
	Identify devices that are used for mechanically processing data?		
	Identify devices that are used for electronically processing data?	7.22 Distinquish between manual, mechanical, and electronic data processing systems?	
	Identify the three components of an electronic data processing system?		
7.3 Computer Overview			
Computer generations	List unique hardware feature of each computer generation?	7.31 Compare the major hardware advancement of each computer generation?	
Types	Describe applications of digital computers?	7.32 Differentiate between uses of digital and analog computers?	
	Describe applications of analog computers?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Advantages/disadvantages	Compare time required to process data using computers and other data processing methods?	7.33 Compare advantages and disadvantages of processing data by computer and by other methods?	
	Compare space required to store data by computer and by other data processing methods?		
	List other advantages of processing data by computer?		
	List disadvantages of processing data by computer?		
7.4 Hardware	Define hardware?	7.41 Categorize a list of hardware according to function?	
	Identify computer input devices?		
	Identify computer storage devices?	7.42 Explain the functions of the central processing unit?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Identify computer output devices?		
	Identify the three parts of the central processing unit and explain the functions of each?		
7.5 Software	Define software?	7.51 Categorize a list of software according to function?	
	Describe functions of the computer operating system?		
	Describe functions of compilers, assemblers, and interpreters?		
	Describe the functions of utility and application programs?	7.52 Given three situations, select the appropriate high-level language to be used?	
	Describe COBOL, RPG, and BASIC programming languages?	7.53 List in correct sequence the steps performed by a programmer in completing a programming assignment?	
	Explain coding as it relates to the development of a program?		
	Define testing and debugging?		
	Explain the importance of documentation?		

BUSINESS DATA PROCESSING I (6640)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
7.6 Storage	Define types of primary storage? Define types of secondary storage?	7.6 Given a list of types of storage, categorize as primary or secondary?	
7.7 Numbering Systems	Define binary, decimal, octal, and hexadecimal numbering systems? Convert numbers in one numbering system--binary, decimal, hexadecimal, or octal--to numbers in the other systems?	7.71 Distinguish among binary, octal, decimal, and hexadecimal numbering systems? Convert numbers in one system to any of the other systems?	
7.8 Data Representation Hollerith code	Convert human-readable data to machine-readable data using the Hollerith code?	7.8 Interpret information presented in the format of the various computer data representation systems?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Binary coded decimal	Interpret the Binary Coded Decimal (BCD) representation?		
EBCDIC/ASCII	Interpret the Extended Binary Coded Decimal Interchange Code and the American Standard Code for Information Interchange data representations?		
8. PROGRAMMING CONCEPTS			
8.1 Procedures	Describe the steps for preparing a program?	8.1 Sequence the steps for preparing a program?	P16
8.2 Problem-Solving Techniques	Describe the steps needed to solve a problem: Describe other problem-solving tools including algorithms, input-processing-output charts, and pseudo-coding?	8.2 Prepare a detailed program flowchart or other logical solution for a given set of problem specifications?	P17

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Identify symbols and rules for flowcharting? Given job specifications, I/O record layouts, and logical solution sheets, develop logic sequences for coding programs?	CAN THE STUDENT:	
8.3 Code	Given logical solution sheets, program specifications, data record layouts, programming reference manuals, and coding sheets, code applications programs? Given programs with errors and verified documentation, desk-check and correct program syntax error(s)?	8.3 Code from a logic sequence an application program using a high-level computer language?	P 21
8.4 Test	Given program specifications, logic sequences, I/O record layouts, listings of source programs, test data, and completed coding sheets for source programs, desk-check the logical validity of source programs prior to compilation or interpretation?	8.4 Test the validity of an application program given appropriate test data?	P 32 33 34

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Compile or interpret source programs? Correct syntax errors from compilation or interpretation listings? Verify text output data with program specifications for compliance?	CAN THE STUDENT:	
8.5 Documentation	Given record layouts, program logical sequences, and program specifications, write documentation narratives? Complete input/output record layout forms? Given program requirements, related systems flowcharts, source program listings, logic sequence forms, and job control set-up specifications, prepare console operator's run sheets? Given program and operation specifications, prepare data control instructional worksheets?	8.5 Document a program?	P 38 42 44 45

BUSINESS DATA PROCESSING I (6640)				
Topical Outline		Enabling Competencies	Terminal Competencies	Ref.
		CAN THE STUDENT:	CAN THE STUDENT:	
9.	PROGRAMMING LANGUAGE: BASIC			
9.1	Language Structure and Statements	Describe the functions of common BASIC statements?	9.11 Explain functions of commonly used BASIC statements?	
		Identify written BASIC statements?	9.12 Identify written common BASIC statements?	
9.2	Systems Commands	Use systems commands at terminal?	9.2 Use appropriate systems commands at a terminal?	
9.3	List	Use BASIC statements to code programs to input and list data on reports?	9.3 Code and run a BASIC program that will produce a listing?	
9.4	Calculations	Explain the hierarchy of operations?	9.4 Code and run a BASIC program that will perform calculations on given data?	
		List and define the arithmetic operators?		
		Use appropriate BASIC statements to code programs to perform addition, subtraction, multiplication, and division?	9.42 Code and run a program using appropriate statements to compare sets of data?	
	Comparing	Identify the logical operators?		
		Identify the relational operators?		
		Code statements using logical and relational operators?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
9.5 Functions and Subroutines	Distinguish between programmer-supplied and computer-generated functions? Explain the functions of subroutines in programming? Use BASIC statements for writing subroutines? Use computer-generated functions?	9.51 Code and run a BASIC program using one or more subroutines? 9.52 Code and run a BASIC program using one or more computer-generated functions?	
9.6 Single-Level Tables	Identify the elements of an array? Explain the use of a single-level table? Use BASIC statements to code programs to produce single-level tables?	9.6 Code and run a BASIC program that will produce a single-level table?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
9.7 Minor, Intermediate, and Final Totals	Identify minor, intermediate, and final totals on computer printouts?	9.7 Code and run a BASIC program that will produce a report with minor, intermediate, and final totals?	
	Explain the logic of producing minor, intermediate, and final totals?		
	Use BASIC statements to code programs to produce minor, intermediate, and final totals?		
9.8 Disk Files	Differentiate between random access and sequential files?		
	Use BASIC statements to code programs to read and process data from sequential disk files?	9.81 Code and run a BASIC program that will read and process data from a sequential disk file?	
	Use BASIC statements to code programs to read and process data from random access disk files?	9.82 Code and run a BASIC program that will read and process data from a random access disk file?	

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
10. UNIT RECORDS			
10.1 Cards	State purpose of corner cut, color stripe, and solid color cards?		
80-column	Identify numbers and locations of columns, rows, and punching positions using the Hollerith code?	10.11 Use Hollerith code to interpret an 80-column punched card?	
	Identify edges and faces of cards?		
	Using blank cards and a pencil, mark digits 0 thru 9 on punched cards?		
	Using blank cards and a pencil, mark letters A-Z on punched cards?		
	Using blank cards and a pencil, mark special characters on punched cards?		
	Identify print, punch, zone, and digit areas?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
96-column	Identify the three 32-column tiers? Read 96-column cards?	10.12 Interpret a 96-column punched card?	
Mark-sensed	Identify methods used to record on mark-sensed cards? Read mark-sensed cards?	10.13 Interpret a mark-sensed card?	
Card care	Describe proper care of cards to prevent tears and warping? Reconstruct damaged cards?	10.14 Compare different types of cards?	
10.2 Card Formats			
Numeric fields	Identify the format and use of numeric fields?	10.2 Construct card formats illustrating numeric, alphabetic, and alphanumeric fields?	
Alphabetic/ alphanumeric fields	Identify the format and use of alphabetic/alphanumeric fields?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
10.3 Card Sorter			
Numeric sorting	Sort decks of cards with numeric fields in ascending or descending order?	10.3 Operate sorter to sequence, select, block sort, and merge cards?	
Alphabetic sorting	Sort decks of cards with alphabetic fields in specified sequences?		
Selecting	Select specific cards from a deck?		
Block sorting	Block sort cards and reassemble decks in required sequences?		
Merging	Sort two decks as a merging operation?		
10.4 Reproducer			
Reproduce	Using source decks and prewired control panels, produce decks that are identical to source decks?	10.41 Operate reproducer to duplicate a source deck or selected cards?	

BUSINESS DATA PROCESSING I (6640)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Gangpunch	Using detail decks, master cards, and prewired panels, punch current data in cards?	10.42 Operate reproducer to gangpunch data?	
10.5 Interpreter	Using prewired panels, interpret decks of cards?	10.5 Operate interpreter to print information on cards?	
10.6 Collator			
Sequence check	Using decks of punched cards and prewired control panels, sequence check decks of cards?	10.6 Operate collator to match, match/merge, merge, and select cards?	
Match	Using decks of punched cards and prewired control panels, match cards from two files?		
Match/merge	Using decks of cards and prewired control panels, match/merge two files?		
Merge	Using decks of cards and prewired control panels, merge two files of cards?		
Select	Using decks of cards, prewired control panels, and job instructions, select specified cards from files?		

BUSINESS DATA PROCESSING I (6640)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
10.7 Card Jams	Clear card jams in unit record equipment without damage to the equipment or cards?	10.7 Clear card jams and reconstruct damaged cards?	

BUSINESS DATA PROCESSING I (6640)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT:
11. PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES	
11.1 Future Business Leaders of America	11.1 Join and participate in local, regional, and state activities of the Future Business Leaders of America?
11.2 Human Relations Skills	
Office behavior	11.21 Exhibit the attitudes and work habits necessary for good peer and employee/employer relations?
Self-discipline	11.22 Exhibit self-control, persistence, and initiative in completing assignments on time?
	11.23 Accept constructive criticism in a positive manner?
Responsibility	11.24 Exhibit traits associated with responsibility including bringing appropriate materials to class, productive use of time, and economic use of supplies?
	11.25 Demonstrate ability to identify personal responsibilities within a group assignment and follow through to completion?
Self-evaluation	11.26 Evaluate personal work habits and attitudes?
Attendance and punctuality	11.27 Maintain regular and prompt attendance?
Following instructions	11.28 Follow oral or written instructions in the completion of assigned tasks?
Appearance and grooming	11.29 Exhibit good grooming and appropriate attire for work according to office standards?

BUSINESS DATA PROCESSING I (6640)	
Topical Outline	**Personal Employability Competencies**
	DOES THE STUDENT:
11.3 Job-Seeking Skills	
Employment opportunities	11.31 List sources of information for employment opportunities?
Self-analysis	11.32 Identify personal strengths, weaknesses, and ambitions and match them with job opportunities?
Resume	11.33 Prepare a typewritten resume to present applicant favorably?
Forms	11.34 Prepare handwritten and typewritten application forms to present applicant favorably?
Letters	11.35 Compose and typewrite acceptable application letters?
Job interview	11.36 Demonstrate acceptable behavior during a simulated job interview?
Follow-up	11.37 Compose and typewrite a positive and appropriate follow-up letter?
	11.38 Identify other appropriate follow-up procedures including telephoning and sending additional correspondence?
11.4 Organizational Skills	
Station	11.41 Keep the area in and around the work station uncluttered?
Task	11.42 Assemble supplies and information necessary to complete assigned tasks?
Work priorities	11.43 Plan work efficiently to meet deadlines?
	11.44 Organize work materials for best use of time?

BUSINESS DATA PROCESSING I (6640)	
Topical Outline	Personal Employability Competencies
11.5 Communication Skills	DOES THE STUDENT: 11.51 Demonstrate effective oral communications skills necessary in a data processing environment? 11.52 Demonstrate telephone communications skills necessary in a data processing environment?

BUSINESS DATA PROCESSING II (6650)

Grade Level: 12

Prequisites: Business Data Processing I

Business Data Processing II is a double-period occupational preparation course offered at the twelfth-grade level. Emphasis is placed on electronic data processing and writing programs. COBOL and other programming languages are taught. As part of the course, provision is made for hands-on operation of computer equipment. Accounting systems serve as the basis for instruction. Business systems and organizations are included in the instruction. Skills are developed through simulations of data processing work flow and related work experiences.

The following skill areas are included in Business Data Processing II:

SKILL AREA 1 - COMPUTER CLASSIFICATIONS AND HARDWARE

- 1.1 Types
- 1.2 Components

SKILL AREA 2 - COMPUTER OPERATIONS

- 2.1 Power Up
- 2.2 Daily Operations
- 2.3 Operate, Monitor, and Control
- 2.4 Power Down

SKILL AREA 3 - DATA COMMUNICATIONS

- 3.1 Basic Components
- 3.2 Off-Line
- 3.3 On-Line
- 3.4 Real-Time
- 3.5 Time Sharing
- 3.6 Distributed Processing

SKILL AREA 4 - EVOLUTION, USE, AND IMPACT OF COMPUTERS

- 4.1 Hardware Generations
- 4.2 Software Development
- 4.3 Manufacturers
- 4.4 Users
- 4.5 Impact on Society
- 4.6 Social Issues

SKILL AREA 5 - INPUT/OUTPUT DEVICES

- 5.1 Basic
- 5.2 Special Purpose

SKILL AREA 6 - PROGRAMMING LANGUAGE: COBOL

- 6.1 Introduction
- 6.2 Simple Listing Program
- 6.3 Arithmetic Verbs
- 6.4 COMPUTE Statement
- 6.5 Compare
- 6.6 Report Headings
- 6.7 Totals
- 6.8 Single-Level Tables

SKILL AREA 7 - PROGRAMMING LANGUAGE: RPG

- 7.1 Characteristics
- 7.2 Simple Listing Program
- 7.3 Report Headings
- 7.4 Calculations
- 7.5 Compare
- 7.6 Totals
- 7.7 Sequence Checking/Multiple Record Types
- 7.8 Single-Level Tables

SKILL AREA 8 - SECONDARY STORAGE

- 8.1 File Organization and Access Methods
- 8.2 Magnetic Tapes
- 8.3 Magnetic Disks
- 8.4 Mass Storage Devices

SKILL AREA 9 - SOFTWARE COMPONENTS

- 9.1 Systems Software
- 9.2 Applications Software
- 9.3 Language Selection

SKILL AREA 10 - PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES

- 10.1 Future Business Leaders of America
- 10.2 Human Relations Skills
- 10.3 Job-Seeking Skills
- 10.4 Organizational Skills

BUSINESS DATA PROCESSING II (6650)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
1. **COMPUTER CLASSIFICATIONS AND HARDWARE**			
1.1 Types			
Analog	Describe how an analog computer works and give an illustration of its use?	1.11 Illustrate the use of digital, analog, hybrid, and special and general purpose computers?	
Digital	Describe how a digital computer works and give an illustration of its use?		
Hybrid	Describe the characteristics of a hybrid computer and give an illustration of its use?		
Special and general purpose	Differentiate between special and general purpose computers and give illustrations of their use?		
Micro, mini, and main-frame	List the major characteristics of micro-, mini-, small-to-medium main-frame, and large-scale computers?	1.12 Distinguish between micro-, mini-, small-to-medium main-frame, and large-scale computers?	
	Rank computer systems based on price ranges?		

BUSINESS DATA PROCESSING II (6650)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
1.2 Components	Differentiate between off-line and on-line devices? Differentiate between data preparation devices and input devices? Explain the function of the CPU? List components of the CPU and describe how they interrelate? Distinguish between primary and secondary storage? List secondary storage devices? List and explain the operation of the most common output devices?	1.2 List and briefly explain the basic hardware components of a computer system?	
2. COMPUTER OPERATIONS			
2.1 Power Up	Follow correct sequence to power up computer and I/O devices? Determine media needed and mount on peripheral devices? Determine and load appropriate type continuous forms into the printer?	2.1 Power up computer and I/O devices, initial program load, and prepare computer for daily operations?	DPO 68, 73, 77, 87, 108

BUSINESS DATA PROCESSING II (6650)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Follow initial program load procedure?		
2.2 Daily Operations	Prepare peripheral devices for a specific job?	2.2 Prepare the computer for processing specific types of jobs?	DPO 72, 102, 105, 107, 109, 114, 116, 120
	Identify and load the proper forms and carriage tapes in the printer?		
	Determine files required and mount the disc pack or tape on the proper unit?		
	Select and set up the proper job-control language:		
	compile COBOL or RPG Programs?		
	use utility programs.		
	use locally prepared programs?		
	program in BASIC?		
2.3 Operate, Monitor, and Control	Use operator's manuals?	2.3 Operate, monitor, and control the electronic computer and its peripheral equipment?	DPO 70, 79, 81, 88, 89, 90, 92, 93, 95, 96, 98, 104, 113, 118, 160, 162
	Read cards into the system?		
	Interpret the display lights on the computer?		
	Determine steps in running a job?		
	Communicate with the computer through the console?		

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BUSINESS DATA PROCESSING II (6650)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Detect abnormal job terminations?		
	Detect and log machine malfunctions and take appropriate action?		
	Change media when necessary?		
	Perform halt/restart and error/start procedures?		
	Adjust printer controls to obtain optimum print quality and alignment?		
	Check output material against job specifications?		
	Remove output from peripheral devices, label, and store in proper place?		
	Check job-control statements against job specifications?		
	Separate multi-part forms?		
	Maintain a record of equipment usage?	2.32 Perform basic housekeeping functions?	
	Place files in correct storage locations?		

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
2.4 Power Down	Copy automated machine log into the summary log file and print daily information? Follow sequence and procedures to power down the I/O devices and the computers?	2.4 Secure the computer and I/O devices at the end of operations?	DPO 156
3. DATA COMMUNICATIONS			
3.1 Basic Components			
Terminals	Describe different types of terminals used in data communications?	3.11 Discuss the principle of data communications?	
Modems	Discuss modem modulation and demodulation?		
Communication lines	List basic types of communication lines used in data communications?	3.12 Identify basic components needed for data communications?	
3.2 Off-Line	Sketch and label the components of off-line systems? Explain need for a terminal on both ends of communication lines? Explain why a duplicate copy of the batch occurs?	3.21 Explain the functions of an off-line communication system? 3.22 Sketch the components needed for an off-line communication system?	

BUSINESS DATA PROCESSING II (6650)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	List advantages and disadvantages of an off-line communication system?		
3.3 On-Line	Sketch and label the components of on-line systems?	3.31 Explain the functions of an on-line communication system?	
	Explain why a terminal is not needed at the computer site?	3.32 Sketch the components needed for an on-line communication system?	
	Explain need for secondary storage media?		
	List the advantages and disadvantages of an on-line system?		
3.4 Real-Time	Explain batch processing?	3.41 Discuss the operation of a real-time system?	
	Identify characteristics of real-time systems?	3.42 List two advantages and two disadvantages of real-time systems?	
	List advantages and disadvantages of real-time data processing?		
3.5 Time Sharing	Discuss computer time sharing?	3.5 Discuss the operation of a time-sharing system?	
	Explain how cost of sharing computer time is calculated?		

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: List advantages and disadvantages of sharing a computer?	CAN THE STUDENT:	
3.6 Distributed Processing	Compare stand-alone computer systems and networks?	3.61 Discuss distributed processing systems?	
	List advantages of a distributed processing network?	3.62 List two advantages and two disadvantages of a distributed processing system?	
	List problems of distributed processing systems?		
4. EVOLUTION, USE, AND IMPACT OF COMPUTERS			
4.1 Hardware Generations	Describe the contributions of Charles Babbage to the modern computer?	4.11 Discuss five major historical developments in the evolution of the computer?	
	Discuss the significance of the following computer systems Mark I ENIAC EDVAC/EDSAC UNIVAC IBM 360?	4.12 Discuss the operation and development of computers as they relate to hardware generations?	
	Describe the unique operational characteristics of each hardware generation?		

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
4.2 Software Development	Relate the development of computer software to the hardware generations? Explain the difference between systems software and applications software? Discuss the significance of the following developments symbolic programming high-level programming operating systems application packages?	4.2 Discuss the development of computer software as it relates to the hardware generations?	
4.3 Manufacturers	List major manufacturers of medium- to large-scale computer systems? List companies that specialize in mini-computers? Name manufacturers of micro-computer systems?	4.31 List five major manufacturers of medium- to large-scale computer systems? 4.32 List two major manufacturers of mini-computers? 4.33 List two major manufacturers of micro-computers?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
4.4 Users			
Government	Discuss major computerized applications used by governments?	4.41 Identify two computerized applications in government?	
Business	Discuss the use of computers in the management of business?	4.42 Identify four computerized applications in business?	
	List typical accounting applications that are computerized?		
	Identify office systems that are computerized?		
	List four ways that banks use computers?		
Industry	Give examples of the use of computers in the following industries: petroleum automotive manufacturing research?	4.43 Identify four computerized applications in industry?	
Consumer	List consumer uses of computers in or from the home?	4.44 Identify two computerized applications in the home?	

BUSINESS DATA PROCESSING II (6650)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
4.5 Impact on Society	Explain how computers are affecting the following areas of society: energy medicine law enforcement retailing education transportation?	4.5 Explain for four areas of society how each is affected by computers?	
4.6 Social Issues	Explain common misconceptions and myths related to the computer?	4.61 Identify three common misconceptions and myths related to the computer?	
	Discuss the use of computers and the Privacy Act of 1974?	4.62 For three case situations, describe violations of privacy, fraudulent or criminal uses of computers?	
	Discuss computer crime and fraud?		
5. INPUT/OUTPUT DEVICES			
5.1 Basic	Describe the general functions of the following as I/O devices:	5.1 List seven common I/O devices and describe their functions?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: printer card reader card punch magnetic tape unit including tape cassette magnetic disk unit including hard and floppy disks paper tape unit cathode ray tube with keyboard teletypewriter?	CAN THE STUDENT:	
5.2 Special Purpose	Describe the general functions of the following I/O devices: optical character reader optical mark reader magnetic ink character recognition unit light pen audio pen audio response unit plotter computer output microfilm unit point of sale/transaction device?	5.2 List five special purpose I/O devices and describe their functions?	

BUSINESS DATA PROCESSING II (665?)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
6. PROGRAMMING LANGUAGE: COBOL			
6.1 Introduction	Identify parts of COBOL coding forms? Use sample programs to identify the elements and describe the functions of the four divisions of COBOL programs? List the rules for data names? Define and identify typical COBOL reserve words? Describe important aspects of the structured method of programming?	6.11 Explain the structure and syntax of a simple COBOL listing program? 6.12 Explain the structured programming approach for constructing a program?	
6.2 Simple Listing Program	Develop, code, and run 80-80 list reports?	6.2 Develop, code, and run a COBOL program that will produce an 80-80 list report?	
6.3 Arithmetic Verbs	Code COBOL statements using proper size fields for the four basic arithmetic operations? Identify COBOL editing functions for output?	6.3 Revise and update an 80-80 list program to include one or more arithmetic statements and several common editing functions?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Write PICTURE clauses for the following editing functions: decimal point insertion floating dollar sign zero suppression plus and minus sign insertion CR and DB symbol blank insertion? Define the use of a literal?	CAN THE STUDENT:	
6.4 COMPUTE statement	Identify arithmetic operators? Identify the hierarchy of operations? Write COMPUTE statements?	6.4 Use COMPUTE statements to revise a program with arithmetic operations?	
6.5 Compare	Identify the logical operators? Identify the relational operators? Define sign tests and class tests? Write statements for COBOL sign tests and class tests? Define the logic needed for nested IF statements?	6.51 Code and run a program using appropriate statements to compare sets of data? 6.52 Code and run a program using nested IF statements for comparisons?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Code several nested IF statements?		
	Define condition names?	6.53 Code and run a program using condition names?	
6.6 Report Headings	Write COBOL statements to create heading routines?	6.6 Code and run a program with a heading routine?	
6.7 Totals	Write statements that will generate a final total?	6.71 Code and run a program using the proper statements to produce final totals?	
	Identify minor, intermediate, and final totals on computer printouts?		
	Define control break?	6.72 Code and run a COBOL program with minor and final totals?	
	Explain the logic of a minor total routine?		
6.8 Single-Level Tables	Code statements to define tables in working storage?	6.81 Develop, code, and run a COBOL program with a single-level table using indexing?	
	Explain loading a table?		
	Explain table searches using indexing?		
	Explain table searches using subscripting?	6.82 Develop, code, and run a COBOL program with a single-level table using subscripting?	
	Write correct COBOL statements for the SEARCH and SEARCH ALL verbs?		

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Distinguish between binary and sequential searches?		
7. PROGRAMMING LANGUAGE: RPG			
7.1 Characteristics	Differentiate between job-oriented and procedure-oriented languages?	7.1 Compare RPG programming language to other common business programming languages?	
	Describe RPG's automatic fixed logic and the basic order in which RPG executes?		
	List the different RPG coding sheets and explain the purpose of each?		
	Explain the purpose and use of indicators?		
7.2 Simple Listing Program	List basic input/output media and name the device used in RPG for each?	7.2 Write and run an RPG program to provide a simple listing?	
	Code file and field names according to RPG rules?		
	Define entries used to set up alphanumeric and numeric fields?		
	Distinguish between heading and detail output lines?		

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Explain the difference between SPACE before/after and SKIP before/after?		
	Edit a report using edit words or edit codes?		
	Explain the purpose and use of reserved words?		
7.3 Report Headings	Write a routine to print headings?	7.3 Write a program to create a report using headings?	
7.4 Calculations	Use RPG statements with proper size fields to solve addition, subtraction, multiplication, and division problems?	7.4 Write and run an RPG program using basic calculation statements?	
	Use literals with calculation statements?		
7.5 Compare	Make decisions in an RPG program, and based on those decisions, execute other statements?	7.5 Write and run an RPG program using compare statements?	
7.6 Totals	Code statements that will generate a final total and print a total line?	7.61 Write and run an RPG program to create a final total line on a report?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Differentiate between detail-time and total-time calculations?	7.62 Write and run an RPG program to calculate and print minor, intermediate, and final totals?	
	Differentiate between detail-time and total-time printing?		
	Code to produce single and multiple control breaks with related total lines?		
7.7 Sequence Checking/ Multiple Record Types	Check an input file in ascending or descending order?	7.7 Write and run an RPG program to check a file for an ascending/descending and/or a particular order of records?	
	Code for a file with more than one record type?		
	Given the layout of the input file, the different record layouts, quantity and the sequence of each record type, write the RPG statements to describe the file and assure that the records are in order?		
7.8 Single-Level Tables	Explain the purpose and use of single-level tables in RPG?	7.8 Write and run an RPG program that will produce and process a single-level table?	
	Distinguish between compile-time and pre-execution-time tables?		

BUSINESS DATA PROCESSING II (6650)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Use RPG statements to code a program to produce single-level tables? Locate and print table items?	CAN THE STUDENT:	
8. SECONDARY STORAGE			
8.1 File Organization and Access Methods	Explain sequential processing of data? Explain sequential organization of files? Explain random processing of data? Explain random organization of files? Contrast batch and real-time processing? Describe the need for direct access processing? Explain the concepts of ISAM and VSAM as direct access methods?	8.11 Compare sequential and random file organization? 8.12 Compare direct access to sequential access files? 8.13 Explain two methods of direct access?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
8.2 Magnetic Tapes	Identify the physical properties of magnetic tape including: sizes, lengths, reels, cartridges, reflective spots, channels, bytes, labels, density? Explain data storage and retrieval on tape including parity checking and record blocking? List advantages and disadvantages of magnetic tapes? Describe security precautions including the read-write ring?	8.2 Describe the use of magnetic tape as a secondary storage device?	
8.3 Magnetic Disks	Identify the physical properties of magnetic disks including: platters, channels, tracks, density, cylinders, volume? Explain data storage and retrieval on disks including the read-write heads, parity checking, record blocking, and labels?	8.3 Describe the use of magnetic disks as a secondary storage device?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	List advantages and disadvantages of disk storage?		
8.4 Mass Storage Devices	List advantages and disadvantages of magnetic drum storage?	8.4 Describe the use of three types of mass storage devices?	
	List advantages and disadvantages of data cell storage?		
	Describe mass storage cartridge systems?		
9. SOFTWARE COMPONENTS			
9.1 Systems Software	Describe the purpose of data management software?	9.11 Explain three types of systems software?	
	Explain control programs and their purposes?		
	Describe functions of language translators?		
	Describe the purpose of utility software?	9.12 Explain two types of utility software?	
	Explain the function of a computer operating system?	9.13 Describe the function of a computer operating system?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	List automatic operations performed by operating system?	9.14 Identify two common operating systems in use today?	
	Explain control and monitoring functions of the operating system?		
	Identify operating systems used by major manufacturers?		
9.2 Applications Software	Define application programming?		
Systems	Identify objectives of an inventory management system?	9.21 From a systems flowchart of an inventory management system, discuss the operation of the system?	
	Describe the uses of reports produced by an inventory management system?	9.22 From a systems flowchart of an accounts payable system, discuss the operation of the system?	
	Identify objectives of an accounts payable system?		
	Describe the use of reports produced by an accounts payable system?		
Packages	Explain the purpose of application packages including: management information system customer information computer system reservation system?	9.23 Define and give two examples of application packages?	

BUSINESS DATA PROCESSING II (6650)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
9.3 Language Selection	Discuss characteristics of RPG, COBOL, Assembler, PL/1, BASIC, and Fortran? Discuss problem versus procedure-oriented programming languages? Discuss the differences between compiler and interpretive languages? List several advantages and disadvantages of the following programming languages? COBOL RPG PL/1 Fortran Assembler BASIC? List additional programming languages?	9.31 Discuss the characteristics of four major programming languages including advantages and disadvantages? 9.32 Identify three additional programming languages?	

BUSINESS DATA PROCESSING II (6650)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT:
10. PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES	
10.1 Future Business Leaders of America	10.1 Join and participate in local, regional, and state activities of the Future Business Leaders of America?
10.2 Human Relations Skills	
Office behavior	10.21 Exhibit the attitudes and work habits necessary for good employee/employer relations in the office?
Self-discipline	10.22 Exhibit self-control, persistence, and initiative in completing assignments on time?
	10.23 Accept constructive criticism in a positive manner?
Responsibility	10.24 Exhibit traits associated with responsibility, including bringing appropriate materials to class, productive use of time, and economic use of supplies?
Self-evaluation	10.25 Evaluate personal work habits and attitudes?
Attendance and punctuality	10.26 Maintain regular and prompt attendance?
Following instructions	10.27 Follow oral or written instructions in the completion of assigned tasks?
Appearance and grooming	10.28 Exhibit good grooming and appropriate attire for work according to office standards?
Oral communication	10.29 Demonstrate effective oral communication skills necessary in a data processing environment?

BUSINESS DATA PROCESSING II (6650)	
Topical Outline	**Personal Employability Competencies**
	DOES THE STUDENT:
10.3 Job-Seeking Skills	
Employment opportunities	10.31 Compare and contrast working conditions and advancement opportunities in various data processing systems?
Self-analysis	10.32 Identify personal skills and traits and match them with available job opportunities?
Resume	10.33 Prepare a typewritten resume to present applicant favorably?
Forms	10.34 Prepare typewritten application forms to present applicant favorably?
Letters	10.35 Compose and typewrite acceptable application letters?
Job interview	10.36 Demonstrate acceptable behavior during a simulated job interview?
	10.37 Prepare for the job interview by acquiring knowledge about company in which interested, preparing information about job requirements, and demonstrating appropriate appearance and personal conduct?
Follow-up	10.39 Use other appropriate follow-up procedures, including telephoning and sending additional correspondence?

BUSINESS DATA PROCESSING II (6650)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT:
10.4 Organizational Skills	
Station	10.41 Keep the area in and around the work station uncluttered?
Task	10.42 Assemble supplies and information necessary to complete assigned tasks?
Work priorities	10.43 Plan work efficiently to meet deadlines?
Work evaluation	10.44 Evaluate own work realistically?

CLERICAL ACCOUNTING I (6340)

Grade Level: 11

Prerequisites: General Business and Typewriting

Clerical Accounting I is a one-year, double-period occupational preparation course offered at the eleventh-grade level. Emphasis is placed on numerical information processing, recordkeeping, and basic accounting skills. Students are taught touch operation of ten-key calculating machines and are introduced to equipment commonly used in business offices. Additional instruction includes business mathematics, communication skills, typewriting skills, data processing, and development of job seeking and personal employability skills.

The following skill areas are included in Clerical Accounting I:

Skill Area 1 - ACCOUNTING: ESTABLISH RECORDS

- 1.1 Terminology
- 1.2 Beginning Balance Sheet
- 1.3 Opening Entry
- 1.4 Corrections

Skill Area 2 - ACCOUNTING: BUSINESS TRANSACTIONS

- 2.1 Analyze
- 2.2 Journalize
- 2.3 Prove
- 2.4 Post

Skill Area 3 - ACCOUNTING: END-OF-FISCAL PERIOD

- 3.1 Trial Balance
- 3.2 Adjusting Entries
- 3.3 Complete Worksheet
- 3.4 Closing Procedures
- 3.5 Financial Statements

Skill Area 4 - CALCULATING MACHINES

- 4.1 Arithmetic Review
- 4.2 Machine Operation
- 4.3 Business Applications

Skill Area 5 - CHECKING ACCOUNTS

- 5.1 Check Writing
- 5.2 Endorsements
- 5.3 Deposits
- 5.4 Reconciliation
- 5.5 Journalize

Skill Area 6 - COMMUNICATION SKILLS

- 6.1 Listening Techniques
- 6.2 Telephone Procedures
- 6.3 Written Communications

Skill Area 7 - DATA PROCESSING

- 7.1 Terminology
- 7.2 Relationships

Skill Area 8 - MAINTENANCE AND CARE OF OFFICE EQUIPMENT

- 8.1 Calculating Equipment
- 8.2 Reprographic Equipment
- 8.3 Keyboarding Equipment

Skill Area 9 - PAYROLL

- 9.1 Gross Earnings
- 9.2 Deductions
- 9.3 Net Pay
- 9.4 Records
- 9.5 Disbursements
- 9.6 Journal Entries

Skill Area 10 - PURCHASES AND SALES

- 10.1 Processing Forms
- 10.2 Preparation of Forms

Skill Area 11 - REPROGRAPHICS

- 11.1 Appropriate Use
- 11.2 Terminology
- 11.3 Stencil Preparation
- 11.4 Photocopy Preparation
- 11.5 Machine Operation

Skill Area 12 - TYPEWRITING

- 12.1 Review
- 12.2 Production

Skill Area 13 - PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES

- 13.1 Future Business Leaders of America
- 13.2 Human Relations Skills
- 13.3 Job-Seeking Skills
- 13.4 Organizational Skills

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
1. ACCOUNTING: ESTABLISH RECORDS	CAN THE STUDENT:	CAN THE STUDENT:	
1.1 Terminology	Define specific accounting terms, such as asset, liability, capital, debit, credit, journals, source documents, and double entry accounting?	1.1 Use accounting terms correctly as they occur in oral or written work?	
1.2 Beginning Balance Sheet	Classify items as assets, liabilities, or capital? Solve the accounting equation? Complete a balance sheet including the heading, asset, liability, and capital sections?	1.2 Correctly prepare a beginning balance sheet?	BAPC 28
1.3 Opening Entry	Transfer the beginning balance sheet information to the general journal in correct entry form? Open general ledger accounts by recording the account titles and assigned numbers? Transfer debit and credit balances from opening entry to the general ledger accounts?	1.3 Correctly record and post the opening entry?	BAPC 28
1.4 Corrections	Locate errors? Correct errors using proper techniques?		

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
2. ACCOUNTING: BUSINESS TRANSACTIONS	CAN THE STUDENT:	CAN THE STUDENT:	
2.1 Analyze	Label the debit and credit side of accounts? Label the increase and decrease side of accounts? Record transactions involving increases and decreases in income and expense accounts? Pencil foot and compute account balances?	2.1 Correctly debit and credit accounts for ten transactions involving increases and decreases to the accounts?	
2.2 Journalize	Journalize cash transactions in a two-column general journal and a multi-column cash journal? Record cash transactions including deposits, checks, petty cash, and bank charges? Journalize transactions of a merchandising business in a combination journal and special journals?	2.2 Journalize business transactions for a period of one month?	BAPC 8, 10, 12, 15, 16, 23, 50, 70
2.3 Prove	Foot and prove the equality of debits and credits in journals?	2.31 Foot and prove the equality of debits and credits in one set of journals?	BAPC 27

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Prove cash by comparing check record or actual cash balance with cash journal balance? Total and rule the journals?	CAN THE STUDENT: 2.32 Prove cash?	BAPC 27
2.4 Post	Post the individual amounts in the general columns to the accounts in the general and subsidiary ledgers? Post the totals of the special columns to the general ledger? Indicate proper posting references?	2.4 Post to the proper ledger accounts for a period of one month?	BAPC 8, 10, 15, 19, 21, 22, 23.
3 ACCOUNTING: END-OF-FISCAL PERIOD			
3.1 Trial Balance	Foot ledger accounts and compute the account balances? Record account balances in trial balance columns of worksheet and prove equality of debits and credits? Follow recognized procedures for locating errors that can cause trial balances to be out of balance?	3.1 Prepare a trial balance to prove equality of debits and credits posted to ledger accounts?	BAPC 25

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
3.2 Adjusting Entries	Plan and record adjustments on the worksheet needed to update account balances, such as merchandise inventory, prepaid amounts, supplies, depreciation, and bad debts?	3.21 Accurately record five adjusting entry amounts in proper columns on worksheet?	
		3.22 Accurately journalize and post five adjusting entries?	BAPC 9
	Total adjustment columns and prove equality of debit and credit totals?		
	Update general ledger accounts by recording and posting adjusting entries?		
3.3 Complete Worksheet	Combine trial balance and adjustment columns and extend the income and expense items to the income statement columns?	3.3 Accurately complete worksheet to determine amount of income or loss for a fiscal period?	
	Total the income statement and balance sheet columns?		
	Calculate the net income or the net loss by determining difference in income statement/balance sheet columns?		
	Enter income/loss, total, and rule columns?		
3.4 Closing Procedures	Prepare journal entries to clear the income, cost, and the expense accounts by transferring their		

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	balances to the income and expense summary account?	3.41 Close the ledger by accurately preparing entries needed for summary, capital, and drawing accounts?	
	Prepare a journal entry to transfer the balance of the income and expense summary account to the capital account?		
	Prepare a journal entry to transfer the balance of the drawing account to the capital account?		
	Post the closing entries to the general ledger?	3.42 Post closing entries?	
	Prepare a post-closing trial balance?	3.43 Prepare a post-closing trial balance to prove the equality of debits and credits posted to the accounts?	BAPC 29
3.5 Financial Statements			
Income statement	Prepare income statements from completed worksheets?	3.51 Accurately prepare an income statement from a completed worksheet?	BAPC 30
Capital statement	Prepare capital statements from completed worksheets and capital account information?	3.52 Accurately prepare a capital statement from a completed worksheet and capital account information?	BAPC 31
Balance sheet	Prepare balance sheets from completed worksheets and capital statements?	3.53 Accurately prepare a balance sheet from a completed worksheet and capital statement?	BAPC 32

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Supporting schedules	Apply verification principle using subsidiary and general ledgers to prepare schedules such as accounts receivable, accounts payable, and cost of goods sold?	3.54 Accurately prepare supporting schedules for accounts receivable, accounts payable, and cost of goods sold?	BAPC 33, 34, 35.
Analyze statements	Using financial statements, interpret the condition and progress of businesses during a fiscal period?	3.55 Use the financial statements of a business to extract five items of information to determine the condition and progress of the business?	
4. CALCULATING MACHINES			
4.1 Arithmetic Review	Perform the basic arithmetical processes of addition, subtraction, multiplication, and division with whole numbers, fractions, and decimals?	4.1 Accurately complete 20 mathematical calculations including addition, subtraction, multiplication, and division of whole numbers, decimals, and fractions?	
Percentages	Convert percentages to decimals, decimals to percentages, and use correctly in solving problems? Use interest formulas to compute simple and compound interest? Properly discount a note?		

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Calculate installment interest? Use 60-day method to compute interest?	CAN THE STUDENT:	
Discounts	Define trade discounts, cash discounts, markups, and markdowns? Compute trade discounts, cash discounts, markups, and markdowns?		
4.2 Machine Operation	Operate the machine using proper fingering? Use shortcuts and special function keys to increase speed? Use verification techniques to improve accuracy?	4.2 Operate calculating equipment at a minimum rate and with an error tolerance acceptable for employment?	
4.3 Business Applications	Compute applications of discounts, markups, sales tax, commissions, and interest, and compute extensions?	4.3 Accurately compute, verify amounts, and obtain totals for all items on ten business forms?	SSTR 52
5. CHECKING ACCOUNTS			
5.1 Check Writing	Use the proper procedures for writing and recording checks?	5.1 Accurately and legibly complete check stubs and checks for five payments?	BAPC 40

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
5.2 Endorsements	Use the blank, restrictive, or full method of endorsement as appropriate for the situation?	5.2 Appropriately endorse five checks?	BAPC 72
5.3 Deposits	Prepare deposit slips involving checks, currency, and coins to be deposited?	5.3 Accurately prepare three legible deposit slips?	BAPC 69
5.4 Reconciliation	Reconcile bank statements using canceled checks, previous reconciliations, check records or registers, and records of deposits, so that the balances on the check records or registers agree with the bank statement balances?	5.4 Prepare a simple reconciliation?	BAPC 68
5.5 Journalize	Journalize the entries resulting from reconciliation of bank statements?	5.5 Correctly journalize entry from reconciliation of bank statement?	
6. COMMUNICATION SKILLS			
6.1 Listening Techniques	Demonstrate effective listening techniques?		
6.2 Telephone Procedures	Use basic telephone information such as types of service and calls, time zones, types of equipment, and directories?		

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Incoming calls	Demonstrate correct procedures for answering promptly and properly, taking messages, and terminating calls?	6.21 Answer five routine calls, give non-confidential information, and record messages clearly?	SSTR 68
Outgoing calls	Demonstrate proper procedures for placing outgoing local and long distance calls?	6.22 Place five simulated local and long distance calls of a routine nature, using the directory when necessary?	SSTR 69
6.3 Written Communications	Compose simple business communications using correct grammar, appropriate references, and letter writing principles?	6.3 Compose and typewrite in mailable form simple business correspondence for three given situations?	SSTR 71
7. DATA PROCESSING			
7.1 Terminology	Define basic data processing terms?	7.1 Use data processing terms correctly as they occur in oral or written work?	
7.2 Relationships	Explain the importance of electronic data processing as it relates to accounting?	7.21 Identify the effects of electronic data processing on accounting work?	
	Trace the flow of work between the accounting department and the computer center?	7.22 Describe the relationship that exists between a computer center and an accounting department?	

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
8. MAINTENANCE AND CARE OF OFFICE EQUIPMENT			
8.1 Calculating Equipment	Change the ribbon, replace the paper tape, and make minor machine adjustments?	8.1 Change the ribbon, replace the paper tape, and make minor machine adjustments?	SSTR 41
8.2 Reprographic Equipment	Clean, replace pads, and make minor machine adjustments?	8.2 Clean, replace pads, and make minor machine adjustments?	SSTR 41
8.3 Keyboarding Equipment	Clean keys or element and remove dust, change ribbon, and make machine adjustments?	8.3 Clean keys or element and remove dust, change ribbon, and make machine adjustments?	SSTR 41
9. PAYROLL			
9.1 Gross Earnings	Compute gross earnings for employees who receive salaries, hourly earnings including overtime, and/or commissions?	9.1 Accurately compute five net pay amounts including calculation of gross earnings and deductions?	BAPC 60, 63
9.2 Deductions	Compute required and voluntary deductions using charts and by computations?	9.2 Accurately complete and verify payroll for five employees when given time cards, payroll register, and individual employee earnings records?	BAPC 60, 62
9.3 Net Pay	Compute net pay?		
9.4 Records	Record payroll computations in a payroll register and on the		

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	employees' individual earnings records?		
9.5 Disbursements	Compute a payroll change sheet and cash slips for disbursing cash payroll?	9.5 Accurately prepare five pay vouchers or cash slips from payroll records?	BAPC 64
	Prepare voucher checks?		
9.6 Journal Entries	Journalize and post the entries for payroll including wage and salary expenses, employee Federal Insurance Contributions Act (FICA) taxes, employee income taxes, and other deductions?	9.61 Accurately journalize and post entries for payroll including wage and salary expenses, employee FICA taxes, federal income taxes, state income taxes, and other deductions?	BAPC 24
	Calculate, journalize, and post the entries for employer FICA, State Unemployment Tax Act (SUTA), and Federal Unemployment Tax Act (FUTA) taxes?	9.62 Accurately journalize and post entries for the employer FICA, FUTA, and SUTA taxes?	BAPC 14
10. PURCHASES AND SALES			
10.1 Processing Forms	Identify steps in processing purchases and sales forms?	10.11 Select appropriate purchases and sales forms for five transactions?	
	Use appropriate purchases and sales forms for various transactions?	10.12 Accurately process five unpaid invoices with accompanying receiving documents?	BAPC 47

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Process unpaid invoices and receiving documents for payment?		
	Post appropriate information in the accounts receivable and accounts payable accounts and compute balances?	10.13 Accurately post ten purchases and sales on account directly to the proper ledger accounts from invoices, credit memos, and checks, and compute the balances?	BAPC 21
10.2 Preparation of Forms	Record applicable information on requisitions, purchase orders, and invoices?	10.21 Accurately prepare five requisitions for supplies and equipment to be ordered from catalogs?	SSTR 6
	Compute extensions and totals, applicable discounts, and sales taxes?	10.22 Accurately prepare five purchase orders and five invoices including computation of applicable discounts and sales taxes?	BAPC 37
	Verify descriptive and numerical information after recording and computing?	10.23 Accurately prepare five customer monthly statements from unpaid customer invoices or from ledger sheets?	BAPC 36
	Prepare monthly statements from invoices and ledger sheets?		
11. REPROGRAPHICS			
11.1 Appropriate Use	Describe when stencil or photocopy is the most appropriate duplication method?	11.1 Justify the most appropriate method of duplication, stencil or photocopy, for ten case situations?	

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
11.2 Terminology	Use proper terminology when describing supplies and machine parts for stencil or photocopy equipment?		
11.3 Stencil Preparation	Clean typewriter keys and make proper machine adjustments? Prepare a typewritten stencil using the illuminated drawing board for artwork and lettering when appropriate and make acceptable corrections?	11.3 Prepare two acceptable hand-written or typewritten stencils using artwork and lettering when required?	
11.4 Photocopy Preparation	Select appropriate method of preparation including cutting and pasting according to copying process used? Make corrections that will photocopy acceptably?	11.4 Prepare an acceptable copy for duplication by the photocopy process?	
11.5 Machine Operation	Operate mimeograph or photocopy equipment to produce clear, quality copies?	11.5 Operate stencil or photocopy equipment to produce clear, quality copies?	
12. TYPEWRITING			
12.1 Review Formats	Select and use appropriate formats for business correspondence?		

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Speed and accuracy	Demonstrate incremental improvement in speed and accuracy?	12.1 Typewrite straight copy at a minimum rate with an error tolerance acceptable for employment? (Civil Service minimum--40 wpm, 3 errors, 5 minutes) (NOTE: Number of errors allowed increases as speed increases. Refer to Civil Service Handbook for further information.)	
Error correction	Use various correction media such as erasers, fluid, tape, and self-correcting machines?		
12.2 Production			
Correspondence	Typewrite business correspondence from rough draft copy?	12.21 Typewrite from handwritten or edited rough draft copy two mailable business letters with special features and appropriate copies within 60 minutes?	BAPC 80
Preprinted forms	Typewrite information in appropriate spaces, evenly aligned, using proper machine manipulations?	12.22 Typewrite addresses on ten envelopes at the rate of one per minute with all errors neatly corrected?	SSTR 76
Tables and statistical reports	Typewrite tables and statistical reports with correct horizontal and vertical placement of information?	12.23 Typewrite routine information on three short pre-printed forms with the information placed in appropriate spaces	BAPC 49

CLERICAL ACCOUNTING I (6340)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT: evenly aligned and all errors neatly corrected within 45 minutes? 12.24 Typewrite from handwritten or edited rough draft material two short tables or statistical reports, such as a balance sheet, itinerary, bid, budget, or agenda, with information appropriately placed and errors neatly corrected within 50 minutes?	BAPC 49

CLERICAL ACCOUNTING I (6340)			
Topical Outline		Personal Employability Competencies	
		DOES THE STUDENT:	
13.	PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES		
13.1	Future Business Leaders of America	13.1	Join and participate in local, regional, and state activities of the Future Business Leaders of America?
13.2	Human Relations Skills		
	Office behavior	13.21	Exhibit the attitudes and work habits necessary for good peer and employee/employer relations?
	Self-discipline	13.22	Exhibit self-control, persistence, and initiative in completing assignments on time?
		13.23	Accept constructive criticism in a positive manner?
	Responsibility	13.24	Exhibit traits associated with responsibility including bringing appropriate materials to class, productive use of time, and economic use of supplies?
		13.25	Demonstrate ability to identify personal responsibilities within a group assignment and follow through to completion?
	Self-evaluation	13.26	Evaluate personal work habits and attitudes?
	Attendance and punctuality	13.27	Maintain regular and prompt attendance?
	Following instructions	13.28	Follow oral or written instructions in the completion of assigned tasks?
	Appearance and grooming	13.29	Exhibit good grooming and appropriate attire for work according to office standards?

CLERICAL ACCOUNTING I (6340)		
Topical Outline		Personal Employability Competencies
		CAN THE STUDENT:
13.3 Job-Seeking Skills		
Employment opportunities	13.31	List sources of information for employment opportunities?
Self-analysis	13.32	Identify personal strengths, weaknesses, and ambitions and match them with job opportunities?
Resume	13.33	Prepare a typewritten resume to present applicant favorably?
Forms	13.34	Prepare handwritten and typewritten application forms to present applicant favorably?
Letters	13.35	Compose and typewrite acceptable application letters?
Job interview	13.36	Demonstrate acceptable behavior during a simulated job interview?
Follow-up	13.37	Compose and typewrite a positive and appropriate follow-up letter?
	13.38	Identify other appropriate follow-up procedures including telephoning and sending additional correspondence?
13.4 Organizational Skills		DOES THE STUDENT:
Station	13.41	Keep the area in and around the work station uncluttered?
Task	13.42	Assemble supplies and information necessary to complete assigned tasks?
Work priorities	13.43	Plan work efficiently to meet deadlines?
	13.44	Organize work materials for best use of time?

CLERICAL ACCOUNTING II (6350)

Grade Level: 12 **Prerequisites:** Clerical Accounting I

Clerical Accounting II is a one-year, double-period occupational preparation course offered at the twelfth-grade level. Accounting skills learned in Clerical Accounting I are further developed. Special accounting applications and accounting for partnerships and corporations are included. In addition, skills in mail processing and records management are developed. Instruction is provided in human relations skills, job-seeking skills, office procedures, and organizational skills.

A review of the skills and knowledges developed in Clerical Accounting I is included in Clerical Accounting II so that students can improve, build upon, and integrate previously learned skills and knowledges. Accordingly, much repetition occurs in the topical outlines for Clerical Accounting I and Clerical Accounting II. However, tasks assigned Clerical Accounting II students have greater complexity and require more decision-making skills. Expected competencies for Clerical Accounting II students are based on performance with more difficult or advanced materials than those used with Clerical Accounting I students.

The following skill areas are included in Clerical Accounting II:

Skill Area 1 - ACCOUNTING CYCLE REVIEW
- 1.1 Fundamentals
- 1.2 Terminology
- 1.3 Combination Journal
- 1.4 Special Journals

Skill Area 2 - ACCOUNTING: SPECIAL APPLICATIONS
- 2.1 Sales Tax
- 2.2 Bad Debts
- 2.3 Depreciation
- 2.4 Notes Receivable and Payable
- 2.5 Accrued Income and Expense
- 2.6 Petty Cash

Skill Area 3 - ACCOUNTING: PARTNERSHIPS AND CORPORATIONS
- 3.1 Terminology
- 3.2 Opening Entry
- 3.3 Stock and Dividends
- 3.4 Financial Statements

Skill Area 4 - DATA PROCESSING
- 4.1 Accounting Applications
- 4.2 Flowcharting
- 4.3 Input Preparation and Data Entry
- 4.4 Systems Comparison
- 4.5 Output Use

Skill Area 5 - MAIL PROCESSING
- 5.1 Incoming Mail
- 5.2 Outgoing Mail

Skill Area 6 - OFFICE EXPERIENCE
- 6.1 Simulations
- 6.2 Cooperative Office Education

Skill Area 7 - RECORDS MANAGEMENT
- 7.1 Introduction
- 7.2 Filing

Skill Area 8 - TAX REPORTS

- 8.1 Employers--Federal
- 8.2 Employers--State
- 8.3 Record
- 8.4 Individual Returns

Skill Area 9 - TYPEWRITING

- 9.1 Pre-Printed Business Forms
- 9.2 Tables and Statistical Reports

Skill Area 10 - PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES

- 10.1 Future Business Leaders of America
- 10.2 Human Relations Skills
- 10.3 Job Seeking Skills
- 10.4 Organizational Skills
- 10.5 Personal Finances

CLERICAL ACCOUNTING II (6350)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
1. ACCOUNTING CYCLE REVIEW			
1.1 Fundamentals	Journalize and post transactions and perform end-of-fiscal-period tasks?	1.1 Perform skills involved in completing an accounting cycle for a retail business using either a combination journal or special journals?	
1.2 Terminology	Define typical accounting terms?	1.2 Complete a project encompassing an accounting cycle for a retail business?	BAPC 8, 9 10, 12 14, 15 19, 21 22, 23 24, 25 27, 29 30, 31 32, 33 34
1.3 Combination Journal	Record transactions in a combination journal and post special and general columns to general and subsidiary ledgers? Prepare eight column worksheets with adjustments, capital statements, income statements, and balance sheets?		

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Record adjusting and closing entries in combination journal and post to general ledger?	CAN THE STUDENT:	
1.4 Special Journals			
Terminology	Define special journals? Define terms used in recording in special journals?		
Journalize	Record journal entries in purchases, sales, cash receipts, cash payments, and four-column general journals? Determine sales and purchases discounts accurately and journalize entries for them? Journalize entries for both sales and purchases returns and allowances? Prove cash and record entries for shortages and overages?		
Post	Correctly post to subsidiary and general ledgers?		

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
2. ACCOUNTING: SPECIAL APPLICATIONS			
2.1 Sales Tax	Record entries for cash and charge sales that involve sales taxes?	2.1 Accurately record three sales tax entries in appropriate journals and post?	BAPC 16
	Record entries for payment of sales tax?		
	Post entries for sales tax?		
2.2 Bad Debts	Define bad debts, bad debts expense, valuation account, writing off an account, and aging accounts receivable?	2.21 Accurately compute bad debts expense based on aging accounts receivable or based on estimates?	
	Record adjusting entries for bad debts expense on worksheets and journalize and post?	2.22 Accurately journalize and post the transaction for bad debts expense?	
	Journalize and post entries to write off uncollectible accounts?	2.23 Accurately journalize and post entries to write off three uncollectible accounts?	
	Journalize and post entries for collection of accounts previously written off?	2.24 Accurately journalize and post transaction for the collection of an account previously written off?	

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Report bad debts information on financial statements?	2.25 Correctly prepare financial statements that report bad debts information?	
2.3 Depreciation	Define fixed assets, depreciation, book value, and salvage value?	2.31 Accurately compute the depreciation expense and the book value for two assets?	
	Determine depreciation expense on fixed assets, record the adjusting entries on worksheets, and journalize and post?	2.32 Accurately journalize and post transactions for depreciation expenses previously computed?	
	Journalize and post entries for selling, discarding, or trading fixed assets?	2.33 Accurately journalize and post transactions for selling, discarding, or trading two fixed assets?	
	Report depreciation information on financial statements?	2.34 Correctly prepare two financial statements that report depreciation information?	
2.4 Notes Receivable and Payable	Define promissory note, principal, maturity date, maker, interest-bearing note, interest rate, note payable, bank discount, proceeds, discounted note, note receivable, and dishonored note?	2.41 Accurately compute maturity dates and interest on two notes receivable?	
		2.42 Accurately compute bank discounts and proceeds on two notes payable?	BAPC 13

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Determine maturity dates of notes?	2.43 Accurately journalize and post transactions for notes, interest, and bank discounts?	
	Compute interest on notes?		
	Determine bank discounts, record entries for issuance of notes and payment of discounted notes?	2.44 Correctly prepare financial statements that accurately report notes receivable and notes payable?	
	Record the acceptance and receipt of notes plus interest?		
	Journalize and post entries for dishonored notes?		
	Report notes and interest information on financial statements?		
2.5 Accrued Income and Expense	Define accrued income, accrued interest income, reversing entry, accrued expense, accrued interest expense, accrued salary expense?	2.51 Accurately journalize and post two adjusting entries for accrued revenue and accrued expenses?	BAPC 17, 18
	Determine and make adjustments for accrued income and expenses on worksheets, journalize and post the entries?	2.52 Correctly prepare financial statements that accurately report accrued income and accrued expenses?	
	Report accrued income and expense information on financial statements?		

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Journalize and post reversing entries for accrued income and expenses?	2.53 Accurately journalize and post two reversing entries for accrued income and expenses?	
2.6 Petty Cash			
Journal entries	Journalize and post transactions to establish petty cash accounts?	2.61 Accurately journalize and post transaction to establish the petty cash fund?	
	Journalize and post entries to replenish petty cash funds?	2.62 Correctly journalize and post the entry to replenish the petty cash fund?	
Vouchers	Prepare petty cash vouchers and record them in the petty cash book?	2.63 Accurately prepare five petty cash vouchers and record them in the petty cash book?	
Replenish	Follow procedures to replenish the petty cash fund?	2.64 Accurately follow procedures to replenish the petty cash fund?	
3. ACCOUNTING: PARTNERSHIPS AND CORPORATIONS			
3.1 Terminology	Define partner, partnership, articles of partnership, and distribution of net income statement?		

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Define corporation, incorporators, articles of incorporation, charter, shares, stockholder, capital stock, stock certificate, par value, preferred stock, common stock, board of directors, retained earnings, deficit, and dividend?		
3.2 Opening Entry	Using articles of partnership as source documents, record opening entries?	3.21 Accurately record opening entry for a partnership?	
	Using articles of incorporation as source documents, record opening entries?	3.22 Accurately record the opening entry for a corporation?	
3.3 Stock and Dividends	Record entries for the additional sale of capital stock shares?	3.31 Accurately record the entry for sale of additional capital stock shares?	
	Record entries related to declaring and paying dividends?	3.32 Accurately record entries for declaration and payment of a dividend?	
3.4 Financial Statements	Complete eight-column worksheets, income statements, balance sheets, and capital statements for fiscal periods?	3.41 Accurately complete end-of-fiscal-period work for a partnership?	
		3.42 Accurately complete end-of-fiscal-period work for a corporation?	

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
4. DATA PROCESSING			
4.1 Accounting Applications	Identify accounting applications appropriate for a computer system?	4.11 Describe how a manual accounting operation can be computerized?	
	Compare manual systems and electronic data processing systems in accounting operations including journalizing, posting, payroll, and purchases and sales records?	4.12 Assess the impact of microcomputers on accounting applications?	
	Describe the effects of microcomputers on the accounting operations of businesses?		
4.2 Flowcharting	Use flowchart symbols to show how an accounting problem can be solved using electronic data processing?	4.2 Correctly prepare a flowchart to solve an accounting problem using electronic data processing?	
4.3 Input Preparation and Data Entry	Use data entry equipment, if available, for input?	4.31 Use data-entry equipment at a minimum rate and with an error tolerance acceptable for employment?	
		4.32 Enter information from ten source documents, in predetermined fields, on appropriate media for data entry equipment?	BAPC 46

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
4.4 Systems Comparison	Compare manual, mechanical, punched card, and automated accounting systems with respect to security, storage, capacity, and forms retention?	4.4 Select the most appropriate system for a given situation when security, storage, and forms retention are considered?	
4.5 Output Use	Interpret and use various types of output?	4.5 Prepare a report from information extracted from a computer printout?	
5. MAIL PROCESSING			
5.1 Incoming Mail	Open, stamp, sort, route, and distribute incoming mail?	5.1 Correctly open, stamp, sort, and route ten routine pieces of incoming mail?	BAPC 75
5.2 Outgoing Mail			
Classes	Select appropriate class of mail for various items?		
	Prepare documents for mailing by verifying addresses including ZIP codes, checking for enclosures, folding, and inserting properly into appropriate envelopes?	5.2 Verify addresses, check for enclosures, and properly fold and insert items to be mailed in ten envelopes and determine postage?	BAPC 74
	Use the National Zip Code Directory?		

CLERICAL ACCOUNTING II (6350)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Postage	Determine correct postage for mail of different classes and weights?		
Packages	Prepare packages for mailing?		
Postal information	Use available sources of postal information to process mail?		
6. OFFICE EXPERIENCE			
6.1 Simulations Task and job Flow-of-work	Perform the activities in a simulated or actual office environment and integrate previously acquired competencies?	6.11 Acceptably demonstrate knowledge, skills, and attitudes in performing simulated office tasks? 6.12 Acceptably synthesize previously learned office knowledges, skills, and attitudes to complete the tasks of a given position in a model office?	
6.2 Cooperative Office Education		6.2 Successfully perform the tasks required of a part-time office employee?	

CLERICAL ACCOUNTING II (6350)				
Topical Outline		Enabling Competencies	Terminal Competencies	Ref.
		CAN THE STUDENT:	CAN THE STUDENT:	
7.	RECORDS MANAGEMENT			
7.1	Introduction			
	Need for accurate records	Describe the need for keeping accurate records?		
	Terminology	Use proper terminology when discussing various aspects of filing?		
	Filing supplies and equipment	Identify types of supplies and equipment and describe uses of each?		
7.2	Filing			
	Alphabetic	Apply alphabetic filing rules?	7.21 Correctly index, code, sort, and file 15 documents alphabetically?	BAPC 78
	Numeric	Apply numeric filing rules?	7.22 Correctly sort and file 15 documents numerically?	BAPC 78
	Retrieval	Retrieve requested information or materials?	7.23 Correctly retrieve ten documents or items of information from the files?	BAPC 76

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
8. TAX REPORTS			
8.1 Employers--Federal	Complete employer's quarterly Federal tax returns (Form 941)?	8.11 Accurately complete an employer's quarterly Federal tax return (Form 941)?	BAPC 59
	Complete employer's Federal tax deposit forms (Forms 501 and 508)?	8.12 Accurately complete employer's Federal tax deposit forms (Forms 501 and 508)?	BAPC 65
	Complete employer's annual reconciliation reports of income tax withheld (Form W-3)?	8.13 Accurately complete an employer's annual reconciliation report of income tax withheld (Form W-3)?	BAPC 60
	Complete employer's Federal unemployment tax reports (Form 940)?	8.14 Accurately complete an employer's Federal unemployment tax report (Form 940)?	BAPC 67
8.2 Employers--State	Complete employer's state unemployment tax reports?	8.21 Accurately complete an employer's state unemployment tax report?	BAPC 66
	Complete state sales tax reports?	8.22 Accurately complete a state sales tax report?	
8.3 Record	Journalize and post entries for tax reports?	8.3 Accurately record entries for tax reports previously completed?	BAPC 20

CLERICAL ACCOUNTING II (6350)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
8.4 Individual Returns	Complete individual Federal income tax returns (Forms 1040 and 1040A)?	8.41 Accurately complete individual Federal income tax returns (Forms 1040 and 1040A)?	
	Complete individual state income tax returns (Form 760)?	8.42 Accurately complete an individual state income tax return (Form 760)?	
9. TYPEWRITING			
9.1 Pre-Printed Business Forms	Typewrite information in appropriate spaces, evenly aligned, with proper machine manipulations?	9.1 Typewrite information on three pre-printed forms with the information placed in appropriate spaces, evenly aligned, and all errors neatly corrected within 45 minutes?	SSTR 46 75
9.2 Tables and Statistical Reports	Typewrite tables and statistical reports with correct horizontal and vertical placement of information?	9.2 Typewrite from handwritten edited rough-draft material two average-length tables or statistical reports, such as a balance sheet, itinerary bid, budget, or agenda, with information appropriately placed and errors neatly corrected within 50 minutes?	SSTR 77

CLERICAL ACCOUNTING II (6350)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT:
10.1 **PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES**	
10.1 **Future Business Leaders of America**	10.1 Join and participate in local, regional, and state activities of the Future Business Leaders of America?
10.2 **Human Relations Skills**	
Office behavior	10.21 Exhibit the attitudes and work habits necessary for good employee/employer relations in the office?
Self-discipline	10.22 Exhibit self-control, persistence, and initiative in completing assignments on time?
	10.23 Accept constructive criticism in a positive manner?
Responsibility	10.24 Exhibit traits associated with responsibility, including bringing appropriate materials to class, productive use of time, and economic use of supplies?
Self-evaluation	10.25 Evaluate personal work habits and attitudes?
Attendance and punctuality	10.26 Maintain regular and prompt attendance?
Following instructions	10.27 Follow oral or written instructions in the completion of assigned tasks?
Appearance and grooming	10.28 Exhibit good grooming and appropriate attire for work according to office standards?

CLERICAL ACCOUNTING II (6350)	
Topical Outline	Personal Employability Competencies
	CAN THE STUDENT:
10.3 Job Seeking Skills	
Employment opportunities	10.31 Compare and contrast working conditions and advancement opportunities in large and small, public and private, and urban and rural businesses and organizations?
Self-analysis	10.32 Identify personal skills and traits and match them with available job opportunities?
Resume	10.33 Prepare a typewritten resume to present applicant favorably?
Forms	10.34 Prepare typewritten application forms to present applicant favorably?
Letters	10.35 Compose and typewrite acceptable application letters?
Job interview	10.36 Demonstrate acceptable behavior during a simulated job interview?
	10.37 Prepare for the job interview by acquiring knowledge about company in which interested, preparing information about job requirements, and demonstrating appropriate appearance and personal conduct?
Follow-up	10.38 Compose and typewrite a positive and appropriate follow-up letter?
	10.39 Use other appropriate follow-up procedures, including telephoning and sending additional correspondence?

CLERICAL ACCOUNTING II (6350)	
Topical Outline	**Personal Employability Competencies**
	DOES THE STUDENT:
10.4 Organizational Skills	
Station	10.41 Keep the area in and around the work station uncluttered?
Task	10.42 Assemble supplies and information necessary to complete assigned tasks?
Work priorities	10.43 Plan work efficiently to meet deadlines?
Work evaluation	10.44 Evaluate own work realistically?
Office environment	10.45 Maintain an orderly office and reception area?
	CAN THE STUDENT:
10.5 Personal Finances	
Income management	10.51 Plan a budget based on net pay?
Tax records	10.52 Maintain records required for individual income tax returns?

RECORDKEEPING (6330)

Grade Level: 11 or 12 **Prerequisites:** None

Recordkeeping is a single-period, one-year course offered on an elective basis for eleventh- or twelfth-grade students. Both personal and business recordkeeping skills are developed so that accurate basic financial records can be kept. Business source documents and business procedures are emphasized as well as the formation of positive work habits and attitudes. Recordkeeping introduces students to double-entry bookkeeping procedures.

The following skill areas are included in Recordkeeping:

Skill Area 1 - RECORDKEEPING FUNDAMENTALS
- 1.1 Terminology
- 1.2 Penmanship
- 1.3 Math Review
- 1.4 Corrections

Skill Area 2 - PERSONAL RECORDS
- 2.1 Budget
- 2.2 Credit
- 2.3 Ownership
- 2.4 Banking
- 2.5 Taxes

Skill Area 3 - BUSINESS RECORDS
- 3.1 Sales
- 3.2 Petty Cash
- 3.3 Purchases
- 3.4 Payroll

Skill Area 4 - FILING
- 4.1 Alphabetic
- 4.2 Numeric
- 4.3 Subject

Skill Area 5 - ACCOUNTING FUNDAMENTALS
- 5.1 Terminology
- 5.2 Beginning Balance Sheet
- 5.3 Debits and Credits
- 5.4 Journal Entries
- 5.5 Ledger Accounts
- 5.6 Trial Balances
- 5.7 Financial Statements

Skill Area 6 - PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES
- 6.1 Future Business Leaders of America
- 6.2 Organizational Skills
- 6.3 Human Relations Skills
- 6.4 Responsibility

RECORDKEEPING (6330)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
1. RECORDKEEPING FUNDAMENTALS			
1.1 Terminology	Define specific recordkeeping terms, such as data, recording, sorting, classifying, columns, and rows?	1.1 Use recordkeeping terms correctly as they occur orally or in written work?	
1.2 Penmanship	Record information accurately and legibly?	1.2 Record information legibly and accurately on personal and business documents?	
1.3 Math Review	Complete a variety of basic mathematical computations?	1.3 Accurately complete 20 mathematical calculations including addition, subtraction, multiplication, and division of whole numbers, decimals, and fractions?	
1.4 Corrections	Use proper techniques when locating and correcting errors?	1.4 Locate all errors and use proper techniques to correct errors on assigned work?	
2. PERSONAL RECORDS			
2.1 Budget	Determine individual needs and wants? Estimate income and expenses?	2.1 Compile an estimated budget, record all income and expenses, and compare the actual outcome with the estimated budget for a period of one month?	

RECORDKEEPING (6330)				
Topical Outline		Enabling Competencies	Terminal Competencies	Ref.
		CAN THE STUDENT:	CAN THE STUDENT:	
		Prepare an estimated budget?		
		Record actual cash receipts and payments?		
		Compute and compare in columnar form estimated/actual income and expense totals?		
2.2	Credit	Compute interest charges?	2.21 Accurately compute interest charges for five credit situations?	
		Compare sources of credit and select most financially advantageous one?	2.22 Compare cost of credit for three situations and select best credit source for each one?	
2.3	Ownership			
	Inventory	Prepare inventory records for items such as furniture, insurance, and personal belongings?	2.31 Compile ownership record for items owned?	
	Net worth	List and total items owned and owed to determine owner's net worth?	2.32 Determine net worth?	
	Records storage	List records to be stored?	2.33 Identify types of records that should be stored?	

RECORDKEEPING (6330)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Select proper storage facilities?	2.34 Select locations for protection of various types of records?	
2.4 Banking			
Checking accounts	Prepare a signature card?	2.41 Properly prepare a signature card to open a checking account?	
	Complete check stubs, compute and record new balances?	2.42 Accurately complete legible check stubs and checks for five payments?	BAPC 40
	Write checks?		
	Use the blank, restrictive, or full endorsement for given situations?	2.43 Appropriately endorse five checks?	BAPC 72
	Prepare deposit slips involving checks, currency, and coins?	2.44 Accurately prepare three legible deposit slips?	BAPC 69
	Reconcile bank statements using canceled checks, previous reconciliations, check stubs or registers, and records of deposits, so the balances on the check records or registers agree with the bank statement balances?	2.45 Prepare a simple reconciliation?	BAPC 68

RECORDKEEPING (6330)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Savings account	Explain advantages of various types of savings accounts?	2.46 Describe the advantages of two types of savings accounts?	
	Complete savings deposit and withdrawal slips?	2.47 Accurately complete two deposit and two withdrawal slips for a savings account?	
Promissory notes	Locate information on the face of notes?		
	Compute maturity dates?	2.48 Accurately determine maturity dates for five notes?	
	Compute interest?	2.49 Accurately compute interest on five notes?	
2.5 Taxes			
Computation	Determine sales, Federal Insurance Contributions Act (FICA), and Federal and State income taxes by using tax tables and tax rates?	2.51 Use tax tables or tax rates to compute FICA deductions for five gross pay amounts?	
		2.52 Use tax tables or tax rates to compute sales tax for five purchase amounts?	
		2.53 Use tax tables or tax rates to compute Federal income tax for three individuals?	

RECORDKEEPING (6330)				
Topical Outline		Enabling Competencies	Terminal Competencies	Ref.
		CAN THE STUDENT:	CAN THE STUDENT:	
			2.54 Use tax tables or tax rates to compute State income tax for three individuals?	
	Returns	Prepare 1040A Federal tax returns?	2.55 Accurately prepare a 1040A Federal tax return?	
		Prepare simple State income tax returns?	2.56 Accurately prepare a State income tax return?	
3.	BUSINESS RECORDS			
3.1	Sales	Prepare sales slips, receipts, and credit memos?	3.11 Accurately prepare five sales slips?	BAPC 55
		Extract information from sales slips, receipts, and credit memos?	3.12 Accurately prepare five receipts?	
		Transfer information from charge sales slips, credit memos, and cash receipts to customers' accounts and compute balances?	3.13 Accurately prepare two credit memos?	
			3.14 Transfer information from eight source documents to customers' accounts and compute balances?	BAPC 10, 21
		Make change correctly?	3.15 Select exact coins and bills to be given in change for five transactions?	

RECORDKEEPING (6330)				
Topical Outline		Enabling Competencies	Terminal Competencies	Ref.
		CAN THE STUDENT:	CAN THE STUDENT:	
3.2	Petty Cash	Prepare petty cash vouchers? Record entries, total, and prove petty cash book? Prepare petty cash summaries? Replenish petty cash fund?	3.2 Accurately prepare five petty cash vouchers, record the transactions, and follow the procedures for replenishing the fund?	BAPC 70, 71
3.3	Purchases	Prepare purchase requisitions, purchase orders, and invoices? Extract information from purchase requisitions, purchase orders, and invoices? Determine due date and calculate discounts on invoices? Transfer information from purchase invoices, returns, and payments to creditors' accounts and compute balances?	3.31 Accurately prepare three purchase requisitions from source documents? 3.32 Accurately prepare three purchase orders from source documents? 3.33 Accurately prepare three invoices from source documents? 3.34 Transfer information from eight source documents to creditors' accounts and compute balances?	 BAPC 51 BAPC 37 BAPC 10
3.4	Payroll			
	Gross earnings	Compute gross earnings for employees who receive salaries, hourly earnings including overtime, and commissions?	3.41 Accurately compute gross earnings for five employees?	BAPC 60, 63

RECORDKEEPING (6330)				
Topical Outline	Enabling Competencies	Terminal Competencies		Ref.
	CAN THE STUDENT:	CAN THE STUDENT:		
Payroll register	Compute net pay including calculation of gross earnings and deductions?	3.42	Accurately compute five net pay amounts?	BAPC 60
	Compute required and voluntary deductions using tax tables and computations?	3.43	Record the weekly payroll for five employees in a payroll register?	BAPC 60
	Complete and balance totals of a payroll register?			
Employee earnings record	Transfer individuals' earnings from register and compute accumulated earnings?	3.44	Transfer payroll information for employees from payroll register to individual earnings records?	BAPC 60, 62
Disbursements	Write payroll checks?	3.45	Accurately prepare five payroll checks from payroll records?	BAPC 60
4. FILING				
4.1 Alphabetic	Apply alphabetic filing rules to arrange personal and business names?	4.1	Correctly file ten documents alphabetically?	BAPC 78
4.2 Numeric	Arrange numbered records in sequential and chronological order?	4.2	Correctly file ten documents numerically?	BAPC 78

RECORDKEEPING (6330)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
4.3 Subject	Use subject filing procedures to arrange records by topic?	4.3 Correctly file ten documents in alphabetic order according to subject?	SSTR 24
5. ACCOUNTING FUNDAMENTALS			
5.1 Terminology	Define specific terms such as assets, liabilities, owner's equity, T account, post, income, and expenses?	5.1 Use accounting terms correctly as they occur orally or in written work?	
5.2 Beginning Balance Sheet	Classify items as assets or liabilities? Determine owner's equity by using the accounting equation? Prepare balance sheets that include the heading, assets, liabilities, and owner's equity?	5.2 Accurately prepare a beginning balance sheet?	BAPC 28
5.3 Debits and Credits	Label the debit and credit side of T accounts? Label the increase and decrease side of accounts?	5.3 Accurately record ten transactions in T accounts and prove balances of the accounts?	

RECORDKEEPING (6330)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Record transactions involving increases and decreases in T accounts?		
	Pencil foot T accounts and compute balances?		
	Prove the equality of the debit and credit balances?		
5.4 Journal Entries	Identify column headings of a journal?	5.41 Accurately journalize the opening entry?	BAPC 28
	Record opening entries for beginning balance sheets?	5.42 Accurately journalize 20 transactions?	BAPC 10, 15 23
	Enter date, account titles, source document numbers, and debit and credit amounts for each journal entry?		
	Journalize a variety of business transactions?		
5.5 Ledger Accounts	Label accounts with titles and numbers?	5.5 Open accounts and accurately post 20 journal entries to the accounts?	BAPC 15, 19, 22, 23, 28
	Record beginning balances in accounts?		
	Post journal entries to ledger accounts?		

RECORDKEEPING (6330)				
Topical Outline		Enabling Competencies	Terminal Competencies	Ref.
		CAN THE STUDENT:	CAN THE STUDENT:	
5.6	Trial Balances	Pencil foot and compute account balances?		
		Prove the accuracy of the ledgers by preparing trial balances?	5.6 Accurately prepare a trial balance?	BAPC 25
5.7	Financial Statements			
	Income statement	Classify accounts as income or expense?	5.7 Accurately prepare an income statement from a trial balance?	BAPC 30
		Determine net income/loss by comparing the total income and expenses?		
	Balance sheet	Prepare end-of-period balance sheets?	5.8 Accurately prepare a balance sheet from a trial balance?	BAPC 32

RECORDKEEPING (6330)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT:
6. **PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES**	
6.1 **Future Business Leaders of America**	6.1 Join and participate in local, regional, and state activities of the Future Business Leaders of America?
6.2 **Organizational Skills**	6.21 Organize work materials for best use of time?
	6.22 Plan work efficiently to meet deadlines?
	6.23 Maintain an uncluttered area in and around desk?
6.3 **Human Relations Skills**	6.31 Evaluate own performance realistically?
	6.32 Work harmoniously with others on a group assignment?
	6.33 Demonstrate attitudes of respect and cooperation with peers?
	6.34 Accept constructive criticism in a positive manner?
	6.35 Exhibit self-control in contributing to class discussions?
6.4 **Responsibility**	6.41 Exhibit traits which demonstrate responsibility including bringing proper materials to class, productive use of time, and economic use of supplies?

RECORDKEEPING (6330)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT: 6.42 Attend class regularly? 6.43 Arrive on time? 6.44 Exhibit persistence and initiative in completing assignments? 6.45 Follow oral and written instructions in completing assignments? 6.46 Identify personal responsibilities within a group assignment and follow through to completion?

SURVEY OF DATA PROCESSING

Grade Level: 10, 11, or 12 **Prerequisite:** None

Survey of Data Processing is a half-year or a one-year, single-period course offered on an elective basis for high school students. The course introduces data processing and examines the evolution of computing equipment. Topics covered include growth of data processing systems, applications of data processing, the basic data processing cycle, input/output representation, equipment and systems, and an introduction to computer programming. The course provides students an opportunity to examine careers in data processing.

The skill areas identified for this offering include those for both the 18-week and the 36-week course. For the 36-week course, students should meet all competencies of the 18-week course plus competencies in the Programming Concepts and in the Programming Language: BASIC skill areas. Further, students in the 36-week course should display a higher level of proficiency in meeting the competencies.

The following skill areas are included in Survey of Data Processing:

SKILL AREA 1 - INTRODUCTION
- 1.1 Need for Data
- 1.2 Basic Concepts
- 1.3 History

SKILL AREA 2 - CARD INPUT
- 2.1 Cards
- 2.2 Formats

SKILL AREA 3 - COMPUTER OVERVIEW
- 3.1 Types
- 3.2 Advantages/Disadvantages
- 3.3 Hardware
- 3.4 Software
- 3.5 Storage
- 3.6 Numbering Systems
- 3.7 Data Representation

SKILL AREA 4 - BUSINESS, SOCIETY, AND COMPUTERS
- 4.1 Users
- 4.2 Applications
- 4.3 Social Issues

SKILL AREA 5 - CAREER EXPLORATION
- 5.1 Preparation
- 5.2 Choice
- 5.3 Emerging Occupations

*SKILL AREA 6 - PROGRAMMING CONCEPTS
- 6.1 Procedures
- 6.2 Problem-Solving Techniques
- 6.3 Code
- 6.4 Test
- 6.5 Documentation

*SKILL AREA 7 - PROGRAMMING LANGUAGE: BASIC

- 7.1 Language Structures and Statements
- 7.2 Systems Commands
- 7.3 List
- 7.4 Calculations
- 7.5 Functions and Subroutines
- 7.6 Single-Level Tables
- 7.7 Minor, Intermediate, and Final Totals
- 7.8 Disk Files

SKILL AREA 8 - PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES

- 8.1 Future Business Leaders of America
- 8.2 Organizational Skills
- 8.3 Human Relations Skills
- 8.4 Responsibility

*Skill Areas 6 and 7 are recommended for the 36-week offering of Survey of Data Processing (6612).

SURVEY OF DATA PROCESSING (6611, 6612)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
1. INTRODUCTION	CAN THE STUDENT:	CAN THE STUDENT:	
1.1 Need for Data	List demands for data that business and industry experience?	1.1 Identify a basic data need of business and industry and of government?	
	List demands for data that governments experience?		
1.2 Basic Concepts		1.21 List the steps in the data processing cycle and explain each step?	
Terminology	Define typical data processing terminology?		
Cycle	Identify the steps in the data processing cycle?		
Methods	Identify the operations involved in each step of the data processing cycle?		
	Contrast manual, mechanical, punched card, and electronic methods of processing data?	1.22 Distinguish between manual, mechanical, punched card, and electronic data processing systems?	
	Identify devices used for manually processing data?		
	Identify devices used for mechanically processing data?		
	Identify components of electronic data processing systems?		

SURVEY OF DATA PROCESSING (6611, 6612)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Describe functions of the components?		
1.3 History		1.31 Discuss five historical events in the pre-computer era of data processing	
Pre-computer era	Describe the historical importance of the abacus?		
	Describe the importance of Pascal's adding machine?		
	Describe the importance of Jacquard's Loom?		
	Describe the contributions of Herman Hollerith?		
	Describe the contributions of James Powers?		
	Describe the contributions of Charles Babbage?		
Computer era	Explain the significance of the following computer systems: Mark I ENIAC EDVAC UNIVAC?	1.32 Discuss four historical developments in the computer era?	

SURVEY OF DATA PROCESSING (6611, 6612)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Describe unique characteristics and importance of each computer generation? Discuss the current technological advances in computer systems?	CAN THE STUDENT:	
2. CARD INPUT 2.1 Cards 80-column	State purpose of corner cut, color stripe, and solid color cards? Identify numbers and location of columns, rows, and punching positions using the Hollerith code? Identify edges and faces of cards? Using blank cards and pencil, mark digits 0 thru 9 on punched cards? Using blank cards and pencil, mark letters A-Z on punched cards? Using blank cards and pencil, mark special characters on punched cards?	2.11 Identify card properties and explain purpose of each? 2.12 Use Hollerith code to correctly interpret an 80-column punched card?	

SURVEY OF DATA PROCESSING (6611, 6612)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
96-column	Identify print, punch, zone, and digit areas? Identify the three 32-column tiers? Read 96-column cards?	2.13 Interpret a 96-column punched card?	
Mark-sensed	Identify methods used to record and read data on mark-sensed cards? Read mark-sensed cards?	2.14 Interpret a mark-sensed card?	
2.2 Formats			
Numeric fields	Identify the format and use of numeric fields?	2.2 Interpret card formats illustrating numeric, alphabetic, and alphanumeric fields?	
Alphabetic/alphanumeric fields	Identify the format and use of alphabetic/alphanumeric fields?		
3. COMPUTER OVERVIEW			
3.1 Types	Contrast analog and digital computers? Describe applications of digital computers?	3.1 Differentiate between uses of digital and analog computers?	

SURVEY OF DATA PROCESSING (6611, 6612)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Describe applications of analog computers?		
3.2 Advantages/ Disadvantages	Compare time required to process data using computers and other types of data processing methods?	3.2 Compare advantages and disadvantages of processing data by computer and by other methods?	
	Compare space required to store data by computer and by other data processing methods?		
	List disadvantages of processing data by computer?		
3.3 Hardware	Define hardware?	3.31 Categorize a list of hardware according to function?	
	Identify computer input devices?		
	Identify computer storage devices?		
	Identify computer output devices?		
	Identify the three parts of the central processing unit and explain the function of each?	3.32 Explain the functions of the central processing unit?	
3.4 Software	Define software?	3.41 Categorize a list of software according to function?	
	Describe functions of the computer operating system?		

SURVEY OF DATA PROCESSING (6611, 6612)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Describe functions of compilers, assemblers, and interpreters?		
	Describe functions of utility programs?		
	Describe functions of application programs?		
	Describe how development of the symbolic form of coding simplified the programmer's work?		
	Describe COBOL, RPG, and BASIC programming languages?	3.42 Differentiate between three types of high-level languages?	
	Define flowcharting?	3.43 List in correct sequence the steps performed by a programmer in completing a programming assignment?	
	Explain coding as it relates to the development of a program?		
	Define testing and debugging?		
	Explain the importance of documentation?		
3.5 Storage	Define types of primary storage?	3.5 Given a list of types of storage, categorize as primary or secondary?	
	Define types of secondary storage?		

SURVEY OF DATA PROCESSING (6611, 6612)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
3.6 Numbering Systems	Define binary, decimal, octal, and hexadecimal numbering systems? Convert decimal numbers to binary numbers?	3.6 Distinguish among binary, octal, decimal, and hexadecimal numbering systems?	
3.7 Data Representation		3.7 Interpret information presented in the format of the various computer data representation systems?	
Hollerith code	Convert human-readable data to machine-readable data using the Hollerith code?		
Binary coded decimal	Interpret the Binary Coded Decimal (BCD) Representation?		
EBCDIC/ASCII	Interpret the Extended Binary Coded Decimal Interchange Code and the American Standard Code for Information Interchange data representation?		
4. BUSINESS, SOCIETY, AND COMPUTERS			
4.1 Users	Identify major types of users of electronic data processing?	4.1 List three major users of electronic data processing?	
4.2 Applications	Define a computer application?		

SURVEY OF DATA PROCESSING (6611, 6612)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
Government	Discuss major computerized applications used by governments?	4.21 Identify two computerized applications in government?	
Business	Discuss the use of computers in management? List typical computerized accounting applications? List typical office systems that may be computerized? List typical uses of computers in banks?	4.22 Identify four computerized applications in business?	
Industry	Give examples of the use of computers in the following industries: petroleum automotive manufacturing research?	4.23 Identify four computerized applications in industry?	
Consumer	List consumer uses of computers in or from the home?	4.24 Identify two computerized applications in the home?	
4.3 Social Issues	List examples of computer use in the following areas: energy medicine law enforcement	4.31 Give an example of computer use in each area: energy medicine law enforcement	

SURVEY OF DATA PROCESSING (6611, 6612)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: retailing education transportation? Explain common misconceptions and myths related to the computer? Discuss the use of computers and the Privacy Act of 1974? Discuss computer crime and fraud? Discuss the impact increased use of computers will have on society?	CAN THE STUDENT: retailing education transportation? 4.32 Identify three common misconceptions and myths related to the computer? 4.33 For three case situations, describe violations of privacy, fraudulent or criminal uses of computers? 4.34 Give three examples of the impact computers may have on society?	
5. CAREER EXPLORATION			
5.1 Preparation	List entry-level qualifications required for data processing employment? Identify sources of education for data processing careers?	5.11 List entry-level qualifications for data processing employment? 5.12 List educational opportunities for advanced study in data processing?	
5.2 Choice	List careers in data processing?	5.21 Match a list of job titles with job descriptions and entry-level requirements?	

SURVEY OF DATA PROCESSING (6611, 6612)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: Match operations performed with data processing job titles? Match job titles with entry-level requirements? Match individual abilities and skills with entry-level requirements? Construct career ladders for data processing jobs?	CAN THE STUDENT: 5.22 Construct a personal career ladder for two positions?	
5.3 Emerging Occupations	List examples of new computer applications? Identify career opportunities resulting from new computer applications?	5.3 Give examples of new computer applications that will provide future career opportunities?	
6. PROGRAMMING CONCEPTS			
6.1 Procedures	Describe the steps for preparing a program?	6.1 Sequence the steps for preparing a program?	P16
6.2 Problem-Solving Techniques	Describe the steps needed to solve a problem? Describe other problem-solving tools including algorithms, input-	6.2 Prepare a detailed program flowchart or other logical solution for a given set of problem specifications?	P17

SURVEY OF DATA PROCESSING (6611, 6612)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT: processing, output charts, and pseudo-coding? Identify symbols and rules for flowcharting? Given job specification, I/O record layouts, and logical solution sheets, develop a logic sequence for coding a program?	CAN THE STUDENT:	
6.3 Code	Given logical solution sheets, program specifications, data record layouts, programming reference manuals, and coding sheets, code applications program? Given a program with errors and verified documentation, desk-check and correct program syntax error(s)?	6.3 Code from a logic sequence an application program using a high-level computer language?	P21
6.4 Test	Given program specifications, logic sequence, I/O record layouts, listing of the source program, test data, and completed coding sheets for source program, desk-check the logical validity of a source program prior to compilation or interpretation? Compile or interpret a source program?	6.4 Test the validity of an application program given appropriate test data?	P32, 33, 34

SURVEY OF DATA PROCESSING (6611, 6612)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Correct syntax errors from a compilation or interpretation listing?		
	Verify text output data with program specifications for compliance?		
6.5 Documentation	Given record layouts, program logic, sequence, and program specifications, write a documentation narrative?	6.5 Document a program?	P38, 42, 44, 45
	Complete input/output record layout forms?		
	Given program requirements, related systems flowchart, source program listing, logic sequence forms, and job control set-up specifications, prepare console operator's run sheets?		
	Given program and operation specifications, prepare a data control instructional worksheet?		
7. PROGRAMMING LANGUAGE: BASIC			
7.1 Language Structure and Statements	Describe the functions of common BASIC statements?	7.11 Explain functions of commonly used BASIC statements?	

SURVEY OF DATA PROCESSING (6611, 6612)

Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
	Identify correctly written BASIC statements?	7.12 Identify correctly written common BASIC statements?	
7.2 Systems Commands	Use systems commands at terminal?	7.2 Use appropriate systems commands at a terminal?	
7.3 List	Use BASIC statements to code programs to input and list data on reports?	7.3 Code and run a BASIC program that will produce a listing?	
7.4 Calculations	Explain the hierarchy of operations?	7.4 Code and run a BASIC program that will perform calculations on given data?	
	List and define the arithmetic operators?		
	Use appropriate BASIC statements to code programs to perform addition, subtraction, multiplication, and division?		
7.5 Functions and Subroutines	Distinguish between programmer-supplied and computer-generated functions?	7.51 Code and run a BASIC program using one or more subroutines?	
	Explain the functions of subroutines in programming?	7.52 Code and run a BASIC program using one or more computer-generated functions?	
	Use BASIC statements for writing subroutines?		
	Use computer-generated functions?		

SURVEY OF DATA PROCESSING (6611, 6612)			
Topical Outline	Enabling Competencies	Terminal Competencies	Ref.
	CAN THE STUDENT:	CAN THE STUDENT:	
7.6 Single-Level Tables	Identify the elements of an array? Explain the use of a single-level tables? Use BASIC statements to code programs to produce single-level tables?	7.6 Code and run a BASIC program that will produce a single-level table?	
7.7 Minor, Intermediate, and Final Totals	Identify minor, intermediate, and final totals on a computer printout? Explain the logic of producing minor, intermediate, and final totals? Use BASIC statements to code programs to produce minor, intermediate, and final totals?	7.7 Code and run a BASIC program that will produce a report with minor, intermediate, and final totals?	
7.8 Disk Files	Differentiate between random access and sequential files? Use BASIC statements to code programs to read and process data from sequential disk files? Use BASIC statements to read and process data from random access disk files?	7.81 Code and run a BASIC program that will read and process data from a sequential disk file? 7.82 Code and run a BASIC program that will read and process data from a random access disk file?	

SURVEY OF DATA PROCESSING (6611, 6612)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT:
8. PERSONAL EMPLOYABILITY SKILLS AND KNOWLEDGES	
8.1 Future Business Leaders of America	8.1 Join and participate in local, regional, and state activities of the Future Business Leaders of America?
8.2 Organizational Skills	8.21 Organize work materials for best use of time?
	8.22 Plan work efficiently to meet deadlines?
	8.23 Maintain an uncluttered area in and around desk?
8.3 Human Relations Skills	8.31 Evaluate own performance realistically?
	8.32 Work harmoniously with others on a group assignment?
	8.33 Demonstrate attitudes of respect and cooperation with peers?
	8.34 Accept constructive criticism in a positive manner?
	8.35 Exhibit self-control in contributing to class discussions?
8.4 Responsibility	8.41 Exhibit traits which demonstrate responsibility including bringing proper materials to class, productive use of time, and economic use of supplies?
	8.42 Attend class regularly?
	8.43 Arrive on time?
	8.44 Exhibit persistence and initiative in completing assignments?

SURVEY OF DATA PROCESSING (6611, 6612)	
Topical Outline	Personal Employability Competencies
	DOES THE STUDENT: 8.45 Follow oral and written instructions in completing assignments? 8.46 Identify personal responsibilities within a group assignment and follow through to completion?